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**Waveguides**

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# Broad Selection of Ready-to-Ship Waveguides




Pasternack offers the industry's largest selection of both passive and active waveguide building block components that cover micro-wave and millimeter wave bands up to 110 GHz. This vast selection consists of 20 different categories with over 500 specific designs that include power amplifiers, detectors, bandpass filters, pin diode switches, converter mixers, attenuators, phase shifters, oscillators, couplers, gain horns, magic tees, terminations, transitions, adapters, twists, bends, sections, flexible waveguides, and a 60 GHz development kit. All models are available in-stock for immediate shipment. System designs that utilize integrated waveguide components and interconnects result in a completely shielded signal path with excellent isolation that results in optimum signal processing performance. Another benefit is that extremely high peak power levels can be transmitted with very low losses. Applications include point to point radio links, test and measurement, industrial and front end radars, sensors, and wireless communication.

All waveguide components and accessories can be viewed online at [www.pasternack.com](http://www.pasternack.com) with real-time pricing, inventory, and comprehensive datasheets that include typical performance graphs and detailed CAD drawings.




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## 60 GHz Development System and Modules

PE P/N	Description	RF Frequency Range (GHz)	Mod. BW (GHz)	Gain (dB)	Gain Range (dB)	P1dB (dBm)	Psat (dBm)	NF (dB)	IP3 (dBm)	ECCN
<a href="#">PEM010</a> 	60 GHz Transmit Module	57.0 - 64.8	1.8	38	20	12	15			3A001.B.4.F.1
<a href="#">PEM002-MIM</a> 	60 GHz Receive Module	57.0 - 64.8	1.8	67	65	-36 (Input)		6	-27	3A001.B.4.F.1
<a href="#">PEM009-KIT</a> 	60 GHz Development System	57.0 - 64.8	1.10				15	6	-27	3A001.B.4.F.1







## Waveguide Amplifiers

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Minimum Gain (dB)	Saturated Output Power (dBm)	Output P1dB (dBm)	Flange Type	ECCN
<a href="#">PEWGA3208</a> 	WR-28	26.5 - 40	20		13.5	Square Cover UG-599/U	EAR99
<a href="#">PE15A4023</a> 	WR-12	70.5 - 76.5	25	20		Round Cover UG-387/U	EAR99
<a href="#">PE15A4024</a> 	WR-12	80.5 - 86.5	20	19		Round Cover UG-387/U	EAR99








## Waveguide Detectors

PE P/N	Connector 1	RF Frequency Range (GHz)	Voltage Sensitivity (V/nW)	Input Power (dBm)	Connector 2	ECCN
<a href="#">PE80T3005</a> 	WR-28 UG-599/U	26.5 - 40	-1,000	20	SMA Female	EAR99
<a href="#">PE80T3004</a> 	WR-22 UG-383/U	33 - 50	-800	20	SMA Female	EAR99
<a href="#">PE80T3003</a> 	WR-19 UG-383/U	40 - 60	-800	20	SMA Female	EAR99
<a href="#">PE80T3002</a> 	WR-15 UG-385/U	50 - 75	-700	20	SMA Female	EAR99
<a href="#">PE80T3001</a> 	WR-12 UG-387/U	60 - 90	-900	20	SMA Female	EAR99
<a href="#">PE80T3000</a> 	WR-10 UG-387/U	75 - 100	-900	20	SMA Female	EAR99














## Waveguide Bandpass Filters

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	ECCN
<a href="#">PE-W28F001</a> 	WR-28	30 - 31	1.4:1	Square Cover	EAR99
<a href="#">PE-W28F002</a> 	WR-28	38 - 40	1.5:1	Square Cover	EAR99
<a href="#">PE-W42F001</a> 	WR-42	20.2 - 21.2	1.5:1	Square Cover	EAR99
<a href="#">PE-W42F002</a> 	WR-42	24.25 - 24.45	1.8:1	Square Cover	EAR99
<a href="#">PE-W42F004</a> 	WR-42	24.25 - 24.45	1.5:1	Square Cover	EAR99
<a href="#">PE-W42F003</a> 	WR-42	25.05 - 25.25	1.5:1	Square Cover	EAR99

















## Waveguide Bends

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Bend Plane	Flange Type	ECCN
<a href="#">PEW5B0000</a> 	WR-5	140 - 220	0		E-Bend	Round Cover UG-383/ U-Mod	EAR99
<a href="#">PEW5B0001</a> 	WR-5	140 - 220	0		H-Bend	Round Cover UG-383/ U-Mod	EAR99
<a href="#">PEW6B0000</a> 	WR-6	110 - 170	0.35		E-Bend	Round Cover UG-383/ U-Mod	EAR99
<a href="#">PEW6B0001</a> 	WR-6	110 - 170	0.35		H-Bend	Round Cover UG-383/ U-Mod	EAR99
<a href="#">PEW8B0000</a> 	WR-8	90 - 140	0.3		E-Bend	Round Cover UG-383/ U-Mod	EAR99
<a href="#">PEW8B0001</a> 	WR-8	90 - 140	0.3		H-Bend	Round Cover UG-383/ U-Mod	EAR99
<a href="#">PE-W10B001</a> 	WR-10	75 - 110	0.21	1.1:1	E-Bend	Round Cover UG-387/ U-Mod	EAR99
<a href="#">PE-W10B002</a> 	WR-10	75 - 110	0.21	1.1:1	H-Bend	Round Cover UG-387/ U-Mod	EAR99



## Waveguide Bends Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Bend Plane	Flange Type	ECCN
<a href="#">PE-W12B001</a> 	WR-12	60 - 90	0.21	1.1:1	E-Bend	Round Cover UG-387/U	EAR99
<a href="#">PE-W12B002</a> 	WR-12	60 - 90	0.21	1.1:1	H-Bend	Round Cover UG-387/U	EAR99
<a href="#">PE-W15B001</a> 	WR-15	50 - 75	0.17	1.1:1	E-Bend	Round Cover UG-385/U	EAR99
<a href="#">PE-W15B002</a> 	WR-15	50 - 75	0.17	1.1:1	H-Bend	Round Cover UG-385/U	EAR99
<a href="#">PE-W19B001</a> 	WR-19	40 - 60	0.18	1.1:1	E-Bend	Round Cover UG-383/ U-Mod	EAR99
<a href="#">PE-W19B002</a> 	WR-19	40 - 60	0.18	1.1:1	H-Bend	Round Cover UG-383/ U-Mod	EAR99
<a href="#">PE-W22B002</a> 	WR-22	33 - 50	0.16	1.1:1	H-Bend	Round Cover UG-383/U	EAR99
<a href="#">PEW22B100</a> 	WR-22	33 - 50	0.25	1.15:1	H-Bend	Round Cover UG-383/U	EAR99
<a href="#">PEW22B101</a> 	WR-22	33 - 50	0.25	1.15:1	E-Bend	Round Cover UG-383/U	EAR99
<a href="#">PE-W22B001</a> 	WR-22	33 - 50	0.16	1.1:1	E-Bend	Round Cover UG-383/U	EAR99
<a href="#">PE-W28B001</a> 	WR-28	26.5 - 40	0.28	1.1:1	E-Bend	Square Cover UG-599/U	EAR99
<a href="#">PE-W28B002</a> 	WR-28	26.5 - 40	0.28	1.1:1	H-Bend	Square Cover UG-599/U	EAR99
<a href="#">PE-W28B003</a> 	WR-28	26.5 - 40	0.3	1.08:1	E-Bend	Square Cover UG-599/U	EAR99
<a href="#">PE-W42B001A</a> 	WR-42	18 - 26.5	0.1	1.1:1	E-Bend	Square Cover UG-595/U	EAR99
<a href="#">PE-W42B002A</a> 	WR-42	18 - 26.5	0.1	1.1:1	H-Bend	Square Cover UG-595/U	EAR99
<a href="#">PEW42B100</a> 	WR-42	18 - 26.5	0.15	1.1:1	H-Bend	Square Cover UG-595/U	EAR99

## Waveguide Bends Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Bend Plane	Flange Type	ECCN
<a href="#">PE-W51B001</a> 	WR-51	15 - 22	0.09	1.1:1	E-Bend	UBR180	EAR99
<a href="#">PE-W51B002</a> 	WR-51	15 - 22	0.09	1.1:1	H-Bend	UBR180	EAR99
<a href="#">PE-W62B001</a> 	WR-62	12.4 - 18	0.15	1.08:1	E-Bend	Square Cover UG-419/U	EAR99
<a href="#">PE-W62B002</a> 	WR-62	12.4 - 18	0.15	1.08:1	H-Bend	Square Cover UG-419/U	EAR99
<a href="#">PE-W62B003</a> 	WR-62	12.4 - 18	0.09	1.1:1	E-Bend	Square Cover UG-419/U	EAR99
<a href="#">PE-W62B004</a> 	WR-62	12.4 - 18	0.09	1.1:1	H-Bend	Square Cover UG-419/U	EAR99
<a href="#">PE-W75B001</a> 	WR-75	10 - 15	0.15	1.08:1	E-Bend	UBR120	EAR99
<a href="#">PE-W75B002</a> 	WR-75	10 - 15	0.15	1.08:1	H-Bend	UBR120	EAR99
<a href="#">PE-W90B001</a> 	WR-90	8.2 - 12.4	0.15	1.08:1	E-Bend	Square Cover UG-39/U	EAR99
<a href="#">PE-W90B002</a> 	WR-90	8.2 - 12.4	0.15	1.08:1	H-Bend	Square Cover UG-39/U	EAR99
<a href="#">PE-W90B003A</a> 	WR-90	8.2 - 12.4	0.15	1.08:1	E-Bend	CPR-90G	EAR99
<a href="#">PE-W90B004</a> 	WR-90	8.2 - 12.4	0.15	1.08:1	H-Bend	CPR-90G	EAR99
<a href="#">PE-W112B001</a> 	WR-112	7.05 - 10	0.15	1.08:1	E-Bend	Square Cover UG-51/U	EAR99
<a href="#">PE-W112B002</a> 	WR-112	7.05 - 10	0.15	1.08:1	H-Bend	Square Cover UG-51/U	EAR99
<a href="#">PE-W137B001</a> 	WR-137	5.85 - 8.2	0.15	1.08:1	E-Bend	Round Cover UG-344/U	EAR99
<a href="#">PE-W137B002</a> 	WR-137	5.85 - 8.2	0.15	1.08:1	H-Bend	Round Cover UG-344/U	EAR99
















## Waveguide Bends Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Bend Plane	Flange Type	ECCN
<a href="#">PE-W137B003</a> 	WR-137	5.85 - 8.2	0.15	1.08:1	E-Bend	CPR-137G	EAR99
<a href="#">PE-W137B004</a> 	WR-137	5.85 - 8.2	0.15	1.08:1	H-Bend	CPR-137G	EAR99

## Waveguide Mixers/Converters






PE P/N	RF/LO Frequency Range (GHz)	IF Frequency Range (GHz)	Conversion Loss (dB)	Waveguide Type	Connector	ECCN
<a href="#">PE13U1005</a> 	26.5 - 40	DC - 18 GHz	6	WR-28 UG-599/U	SMA Female	EAR99
<a href="#">PE13U1004</a> 	33 - 50	DC - 18 GHz	7	WR-22 UG-383/U	SMA Female	EAR99
<a href="#">PE13U1003</a> 	40 - 60	DC - 18 GHz	7	WR-19 UG-383/U	SMA Female	EAR99
<a href="#">PE13U1002</a> 	50 - 75	DC - 18 GHz	8	WR-15 UG-385/U	SMA Female	EAR99
<a href="#">PE13U1001</a> 	60 - 90	DC - 18 GHz	9	WR-12 UG-387/U	SMA Female	EAR99
<a href="#">PE13U1000</a> 	75 - 110	DC - 18 GHz	9	WR-10 UG-387/U	SMA Female	EAR99
<a href="#">PE12D1005</a> 	26.5 - 40	DC - 18 GHz	6	WR-28 UG-599/U	SMA Female	EAR99
<a href="#">PE12D1004</a> 	33 - 50	DC - 18 GHz	7	WR-22 UG-383/U	SMA Female	EAR99
<a href="#">PE12D1003</a> 	40 - 60	DC - 18 GHz	7	WR-19 UG-383/U	SMA Female	EAR99
<a href="#">PE12D1002</a> 	50 - 75	DC - 18 GHz	8	WR-15 UG-385/U	SMA Female	EAR99
<a href="#">PE12D1001</a> 	60 - 90	DC - 18 GHz	9	WR-12 UG-387/U	SMA Female	EAR99
<a href="#">PE12D1000</a> 	75 - 110	DC - 18 GHz	9	WR-10 UG-387/U-Mod	SMA Female	EAR99

## Waveguide Couplers-Broadwall

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PE-W10CP001-20</a> 	WR-10	75 - 110	1.1	1.2:1	20	30	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W10CP003-20</a> 	WR-10	75 - 110	1.1	1.2:1	20	30	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W10CP001-10</a> 	WR-10	75 - 110	1.4	1.2:1	10	30	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W10CP003-10</a> 	WR-10	75 - 110	1.4	1.2:1	10	30	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW10CP010-20</a> 	WR-10	75 - 110		1.1:1	20	40	Round Cover UG-387/U	EAR99
<a href="#">PE-W12CP001-20</a> 	WR-12	60 - 90	1	1.2:1	20	30	Round Cover UG-387/U	EAR99
<a href="#">PE-W12CP003-20</a> 	WR-12	60 - 90	1	1.2:1	20	30	Round Cover UG-387/U	EAR99
<a href="#">PE-W12CP001-10</a> 	WR-12	60 - 90	1.4	1.2:1	10	30	Round Cover UG-387/U	EAR99
<a href="#">PE-W12CP003-10</a> 	WR-12	60 - 90	1.4	1.2:1	10	30	Round Cover UG-387/U	EAR99
<a href="#">PE-W15CP001-20</a> 	WR-15	50 - 75	1	1.2:1	20	30	Round Cover UG-385/U	EAR99
<a href="#">PE-W15CP003-20</a> 	WR-15	50 - 75	1	1.2:1	20	30	Round Cover UG-385/U	EAR99
<a href="#">PE-W15CP001-10</a> 	WR-15	50 - 75	1.4	1.2:1	10	30	Round Cover UG-385/U	EAR99
<a href="#">PE-W15CP003-10</a> 	WR-15	50 - 75	1.4	1.2:1	10	30	Round Cover UG-385/U	EAR99
<a href="#">PE-W19CP003-10</a> 	WR-19	40 - 60	0.8	1.2:1	10	30	Round Cover UG-383/U	EAR99
<a href="#">PE-W19CP003-20</a> 	WR-19	40 - 60	0.8	1.2:1	20	30	Round Cover UG-383/U	EAR99












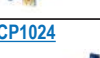
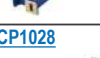




## Waveguide Couplers-Broadwall Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PE-W19CP001-20</a> 	WR-19	40 - 60	1	1.2:1	20	30	Round Cover UG-383/U	EAR99
<a href="#">PE-W19CP001-10</a> 	WR-19	40 - 60	1.4	1.2:1	10	30	Round Cover UG-383/U	EAR99
<a href="#">PEW22CP010-20</a> 	WR-22	33 - 50	0.8	1.1:1	20	30	Round Cover UG-383/U	EAR99
<a href="#">PE-W22CP001-20</a> 	WR-22	33 - 50	0.8	1.2:1	20	30	Round Cover UG-383/U	EAR99
<a href="#">PE-W22CP003-20</a> 	WR-22	33 - 50	0.8	1.2:1	20	30	Round Cover UG-383/U	EAR99
<a href="#">PE-W22CP001-10</a> 	WR-22	33 - 50	1.2	1.2:1	10	30	Round Cover UG-383/U	EAR99
<a href="#">PE-W22CP003-10</a> 	WR-22	33 - 50	1.2	1.2:1	10	30	Round Cover UG-383/U	EAR99
<a href="#">PEW28CP010-20</a> 	WR-28	26.5 - 40	0.6	1.1:1	20	30	Square Cover UG-599/U	EAR99
<a href="#">PE-W28CP002-20</a> 	WR-28	26.5 - 40	0.6	1.2:1	20	30	Square Cover UG-599/U	EAR99
<a href="#">PE-W28CP003-20</a> 	WR-28	26.5 - 40	0.6	1.2:1	20	30	Square Cover UG-599/U	EAR99
<a href="#">PE-W28CP002-10</a> 	WR-28	26.5 - 40	1	1.2:1	10	30	Square Cover UG-599/U	EAR99
<a href="#">PE-W28CP003-10</a> 	WR-28	26.5 - 40	1	1.2:1	10	30	Square Cover UG-599/U	EAR99
<a href="#">PEWCP1006</a> 	WR-34	22 - 33	0.15	1.05:1	20	35	Square Cover UG-1530/U	EAR99
<a href="#">PEWCP1007</a> 	WR-34	22 - 33	0.15	1.05:1	30	35	Square Cover UG-1530/U	EAR99
<a href="#">PEWCP1005</a> 	WR-34	22 - 33	0.35	1.05:1	10	35	Square Cover UG-1530/U	EAR99




## Waveguide Couplers-Broadwall Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PE-W42CP002-20</a> 	WR-42	18 - 26.5	0.6	1.2:1	20	30	Square Cover UG-595/U	EAR99
<a href="#">PE-W42CP003-20</a> 	WR-42	18 - 26.5	0.6	1.2:1	20	30	Square Cover UG-595/U	EAR99
<a href="#">PE-W42CP004-20</a> 	WR-42	18 - 26.5	0.6	1.2:1	20	30	Square Cover UG-595/U	EAR99
<a href="#">PE-W42CP002-10</a> 	WR-42	18 - 26.5	1	1.2:1	10	30	Square Cover UG-595/U	EAR99
<a href="#">PE-W42CP003-10</a> 	WR-42	18 - 26.5	1	1.2:1	10	30	Square Cover UG-595/U	EAR99
<a href="#">PE-W42CP004-10</a> 	WR-42	18 - 26.5	1	1.2:1	10	30	Square Cover UG-595/U	EAR99
<a href="#">PEWCP1008</a> 	WR-51	15 - 22	0.15	1.05:1	10	35	Square Cover	EAR99
<a href="#">PEWCP1009</a> 	WR-51	15 - 22	0.15	1.05:1	20	35	Square Cover	EAR99
<a href="#">PEWCP1010</a> 	WR-51	15 - 22	0.15	1.05:1	30	35	Square Cover	EAR99
<a href="#">PEWCP1011</a> 	WR-62	12.4 - 18	0.15	1.05:1	10	40	Square Cover UG-419/U	EAR99
<a href="#">PEWCP1012</a> 	WR-62	12.4 - 18	0.15	1.05:1	20	40	Square Cover UG-419/U	EAR99
<a href="#">PEWCP1013</a> 	WR-62	12.4 - 18	0.15	1.05:1	30	40	Square Cover UG-419/U	EAR99
<a href="#">PEWCP1014</a> 	WR-75	10 - 15	0.15	1.05:1	10	40	Square Cover	EAR99
<a href="#">PEWCP1015</a> 	WR-75	10 - 15	0.15	1.05:1	20	40	Square Cover	EAR99
<a href="#">PEWCP1016</a> 	WR-75	10 - 15	0.15	1.05:1	30	40	Square Cover	EAR99

## Waveguide Couplers-Broadwall Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCP1020</a> 	WR-90	8.2 - 12.4	0.15	1.05:1	10	40	CPR-90G	EAR99
<a href="#">PEWCP1017</a> 	WR-90	8.2 - 12.4	0.15	1.05:1	10	40	Square Cover UG-39/U	EAR99
<a href="#">PEWCP1021</a> 	WR-90	8.2 - 12.4	0.15	1.05:1	20	40	CPR-90G	EAR99
<a href="#">PEWCP1018</a> 	WR-90	8.2 - 12.4	0.15	1.05:1	20	40	Square Cover UG-39/U	EAR99
<a href="#">PEWCP1022</a> 	WR-90	8.2 - 12.4	0.15	1.05:1	30	40	CPR-90G	EAR99
<a href="#">PEWCP1019</a> 	WR-90	8.2 - 12.4	0.15	1.05:1	30	40	Square Cover UG-39/U	EAR99
<a href="#">PEWCP1026</a> 	WR-112	7.05 - 10	0.15	1.05:1	10	40	CPR-112G	EAR99
<a href="#">PEWCP1023A</a> 	WR-112	7.05 - 10	0.15	1.05:1	10	40	Square Cover UG-51/U	EAR99
<a href="#">PEWCP1027</a> 	WR-112	7.05 - 10	0.15	1.05:1	20	40	CPR-112G	EAR99
<a href="#">PEWCP1024</a> 	WR-112	7.05 - 10	0.15	1.05:1	20	40	Square Cover UG-51/U	EAR99
<a href="#">PEWCP1028</a> 	WR-112	7.05 - 10	0.15	1.05:1	30	40	CPR-112G	EAR99
<a href="#">PEWCP1025</a> 	WR-112	7.05 - 10	0.15	1.05:1	30	40	Square Cover UG-51/U	EAR99
<a href="#">PEWCP1032</a> 	WR-137	5.85 - 8.2	0.15	1.05:1	10	40	CPR-137G	EAR99
<a href="#">PEWCP1029</a> 	WR-137	5.85 - 8.2	0.15	1.05:1	10	40	Round Cover UG-344/U	EAR99
<a href="#">PEWCP1033</a> 	WR-137	5.85 - 8.2	0.15	1.05:1	20	40	CPR-137G	EAR99

















## Waveguide Couplers-Broadwall Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCP1030</a> 	WR-137	5.85 - 8.2	0.15	1.05:1	20	40	Round Cover UG-344/U	EAR99
<a href="#">PEWCP1034</a> 	WR-137	5.85 - 8.2	0.15	1.05:1	30	40	CPR-137G	EAR99
<a href="#">PEWCP1031</a> 	WR-137	5.85 - 8.2	0.15	1.05:1	30	40	Round Cover UG-344/U	EAR99
















## Waveguide Couplers-Crossguide

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCP1035</a> 	WR-34	22 - 33	0.1	1.05:1	20	20	Square Cover UG-1530/U	EAR99
<a href="#">PEWCP1036</a> 	WR-34	22 - 33	0.1	1.05:1	30	20	Square Cover UG-1530/U	EAR99
<a href="#">PEWCP1037</a> 	WR-34	22 - 33	0.1	1.05:1	40	25	Square Cover UG-1530/U	EAR99
<a href="#">PEWCP1038</a> 	WR-34	22 - 33	0.1	1.05:1	50	10	Square Cover UG-1530/U	EAR99
<a href="#">PEWCP1039</a> 	WR-42	18 - 26.5	0.1	1.05:1	20	30	Square Cover UG-595/U	EAR99
<a href="#">PEWCP1040</a> 	WR-42	18 - 26.5	0.1	1.05:1	30	20	Square Cover UG-595/U	EAR99
<a href="#">PEWCP1041</a> 	WR-42	18 - 26.5	0.1	1.05:1	40	20	Square Cover UG-595/U	EAR99
<a href="#">PEWCP1042</a> 	WR-42	18 - 26.5	0.1	1.05:1	50	10	Square Cover UG-595/U	EAR99
<a href="#">PEWCP1043</a> 	WR-51	15 - 22	0.1	1.05:1	20	20	Square Cover	EAR99
<a href="#">PEWCP1044</a> 	WR-51	15 - 22	0.1	1.05:1	30	30	Square Cover	EAR99
<a href="#">PEWCP1045</a> 	WR-51	15 - 22	0.1	1.05:1	40	30	Square Cover	EAR99



## Waveguide Couplers-Crossguide Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCP1046</a> 	WR-51	15 - 22	0.1	1.05:1	50	10	Square Cover	EAR99
<a href="#">PEWCP1047</a> 	WR-62	12.4 - 18	0.1	1.05:1	20	20	Square Cover UG-419/U	EAR99
<a href="#">PEWCP1048</a> 	WR-62	12.4 - 18	0.1	1.05:1	30	10	Square Cover UG-419/U	EAR99
<a href="#">PEWCP1049</a> 	WR-62	12.4 - 18	0.1	1.05:1	40	30	Square Cover UG-419/U	EAR99
<a href="#">PEWCP1050</a> 	WR-62	12.4 - 18	0.1	1.05:1	50	10	Square Cover UG-419/U	EAR99
<a href="#">PEWCP1051</a> 	WR-75	10 - 15	0.1	1.05:1	20	25	Square Cover	EAR99
<a href="#">PEWCP1052A</a> 	WR-75	10 - 15	0.1	1.05:1	30	25	Square Cover	EAR99
<a href="#">PEWCP1053</a> 	WR-75	10 - 15	0.1	1.05:1	40	15	Square Cover	EAR99
<a href="#">PEWCP1054</a> 	WR-75	10 - 15	0.1	1.05:1	50	10	Square Cover	EAR99
<a href="#">PEWCP1055</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	20	20	Square Cover UG-39/U	EAR99
<a href="#">PEWCP1059</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	20	25	CPR-90G	EAR99
<a href="#">PEWCP1060</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	30	20	CPR-90G	EAR99
<a href="#">PEWCP1056</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	30	20	Square Cover UG-39/U	EAR99
<a href="#">PEWCP1061</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	40	10	CPR-90G	EAR99
<a href="#">PEWCP1057</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	40	10	Square Cover UG-39/U	EAR99
<a href="#">PEWCP1062</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	50	10	CPR-90G	EAR99

## Waveguide Couplers-Crossguide Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCP1058</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	50	10	Square Cover UG-39/U	EAR99
<a href="#">PEWCP1067</a> 	WR-112	7.05 - 10	0.1	1.05:1	20	25	CPR-112G	EAR99
<a href="#">PEWCP1063</a> 	WR-112	7.05 - 10	0.1	1.05:1	20	45	Square Cover UG-51/U	EAR99
<a href="#">PEWCP1068</a> 	WR-112	7.05 - 10	0.1	1.05:1	30	25	CPR-112G	EAR99
<a href="#">PEWCP1064</a> 	WR-112	7.05 - 10	0.1	1.05:1	30	25	Square Cover UG-51/U	EAR99
<a href="#">PEWCP1069</a> 	WR-112	7.05 - 10	0.1	1.05:1	40	20	CPR-112G	EAR99
<a href="#">PEWCP1065</a> 	WR-112	7.05 - 10	0.1	1.05:1	40	20	Square Cover UG-51/U	EAR99
<a href="#">PEWCP1070</a> 	WR-112	7.05 - 10	0.1	1.05:1	50	10	CPR-112G	EAR99
<a href="#">PEWCP1066</a> 	WR-112	7.05 - 10	0.1	1.05:1	50	10	Square Cover UG-51/U	EAR99
<a href="#">PEWCP1075</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	20	20	CPR-137G	EAR99
<a href="#">PEWCP1071</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	20	25	Round Cover UG-344/U	EAR99
<a href="#">PEWCP1076</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	30	20	CPR-137G	EAR99
<a href="#">PEWCP1072</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	30	20	Round Cover UG-344/U	EAR99
<a href="#">PEWCP1077</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	40	20	CPR-137G	EAR99
<a href="#">PEWCP1073</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	40	20	Round Cover UG-344/U	EAR99














## Waveguide Couplers-Crossguide Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCP1078</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	50	10	CPR-137G	EAR99
<a href="#">PEWCP1074</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	50	10	Round Cover UG-344/U	EAR99

## Waveguide Couplers-Crossguide with Termination


PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCT1000</a> 	WR-34	22 - 33	0.1	1.05:1	20	20	Square Cover UG-1530/U	EAR99
<a href="#">PEWCT1001</a> 	WR-34	22 - 33	0.1	1.05:1	30	20	Square Cover UG-1530/U	EAR99
<a href="#">PEWCT1002</a> 	WR-34	22 - 33	0.1	1.05:1	40	25	Square Cover UG-1530/U	EAR99
<a href="#">PEWCT1003</a> 	WR-34	22 - 33	0.1	1.05:1	50	10	Square Cover UG-1530/U	EAR99
<a href="#">PEWCT1004</a> 	WR-42	18 - 26.5	0.1	1.05:1	20	30	Square Cover UG-595/U	EAR99
<a href="#">PEWCT1005</a> 	WR-42	18 - 26.5	0.1	1.05:1	30	20	Square Cover UG-595/U	EAR99
<a href="#">PEWCT1006</a> 	WR-42	18 - 26.5	0.1	1.05:1	40	20	Square Cover UG-595/U	EAR99
<a href="#">PEWCT1007</a> 	WR-42	18 - 26.5	0.1	1.05:1	50	10	Square Cover UG-595/U	EAR99
<a href="#">PEWCT1008</a> 	WR-51	15 - 22	0.1	1.05:1	20	20	Square Cover	EAR99
<a href="#">PEWCT1009</a> 	WR-51	15 - 22	0.1	1.05:1	30	30	Square Cover	EAR99
<a href="#">PEWCT1010</a> 	WR-51	15 - 22	0.1	1.05:1	40	30	Square Cover	EAR99
<a href="#">PEWCT1011</a> 	WR-51	15 - 22	0.1	1.05:1	50	10	Square Cover	EAR99

## Waveguide Couplers-Crossguide with Termination Continued

















PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCT1012</a> 	WR-62	12.4 - 18	0.1	1.05:1	20	20	Square Cover UG-419/U	EAR99
<a href="#">PEWCT1013</a> 	WR-62	12.4 - 18	0.1	1.05:1	30	10	Square Cover UG-419/U	EAR99
<a href="#">PEWCT1014</a> 	WR-62	12.4 - 18	0.1	1.05:1	40	30	Square Cover UG-419/U	EAR99
<a href="#">PEWCT1015</a> 	WR-62	12.4 - 18	0.1	1.05:1	50	10	Square Cover UG-419/U	EAR99
<a href="#">PEWCT1016</a> 	WR-75	10 - 15	0.1	1.05:1	20	25	Square Cover	EAR99
<a href="#">PEWCT1017</a> 	WR-75	10 - 15	0.1	1.05:1	30	25	Square Cover	EAR99
<a href="#">PEWCT1018</a> 	WR-75	10 - 15	0.1	1.05:1	40	15	Square Cover	EAR99
<a href="#">PEWCT1019</a> 	WR-75	10 - 15	0.1	1.05:1	50	10	Square Cover	EAR99
<a href="#">PEWCT1020</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	20	20	Square Cover UG-39/U	EAR99
<a href="#">PEWCT1024</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	20	25	CPR-90G	EAR99
<a href="#">PEWCT1025</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	30	20	CPR-90G	EAR99
<a href="#">PEWCT1021</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	30	20	Square Cover UG-39/U	EAR99
<a href="#">PEWCT1026</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	40	10	CPR-90G	EAR99
<a href="#">PEWCT1022</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	40	10	Square Cover UG-39/U	EAR99
<a href="#">PEWCT1027</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	50	10	CPR-90G	EAR99
<a href="#">PEWCT1023</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	50	10	Square Cover UG-39/U	EAR99









## Waveguide Couplers-Crossguide with Termination Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCT1032</a> 	WR-112	7.05 - 10	0.1	1.05:1	20	25	CPR-112G	EAR99
<a href="#">PEWCT1028</a> 	WR-112	7.05 - 10	0.1	1.05:1	20	45	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1033</a> 	WR-112	7.05 - 10	0.1	1.05:1	30	25	CPR-112G	EAR99
<a href="#">PEWCT1029</a> 	WR-112	7.05 - 10	0.1	1.05:1	30	25	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1034</a> 	WR-112	7.05 - 10	0.1	1.05:1	40	20	CPR-112G	EAR99
<a href="#">PEWCT1030</a> 	WR-112	7.05 - 10	0.1	1.05:1	40	20	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1035</a> 	WR-112	7.05 - 10	0.1	1.05:1	50	10	CPR-112G	EAR99
<a href="#">PEWCT1031</a> 	WR-112	7.05 - 10	0.1	1.05:1	50	10	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1040</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	20	20	CPR-137G	EAR99
<a href="#">PEWCT1036</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	20	25	Round Cover UG-344/U	EAR99
<a href="#">PEWCT1041</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	30	20	CPR-137G	EAR99
<a href="#">PEWCT1037</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	30	20	Round Cover UG-344/U	EAR99
<a href="#">PEWCT1042</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	40	20	CPR-137G	EAR99
<a href="#">PEWCT1038</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	40	20	Round Cover UG-344/U	EAR99
<a href="#">PEWCT1043</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	50	10	CPR-137G	EAR99
<a href="#">PEWCT1039</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	50	10	Round Cover UG-344/U	EAR99













## Waveguide Couplers-Crossguide with Termination and WG to Coax Adapter

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCT1044</a> 	WR-34	22 - 33	0.1	1.05:1	20	20	Square Cover UG-1530/U	EAR99
<a href="#">PEWCT1045</a> 	WR-34	22 - 33	0.1	1.05:1	30	20	Square Cover UG-1530/U	EAR99
<a href="#">PEWCT1046</a> 	WR-34	22 - 33	0.1	1.05:1	40	25	Square Cover UG-1530/U	EAR99
<a href="#">PEWCT1047</a> 	WR-34	22 - 33	0.1	1.05:1	50	10	Square Cover UG-1530/U	EAR99
<a href="#">PEWCT1048</a> 	WR-42	18 - 26.5	0.1	1.05:1	20	30	Square Cover UG-595/U	EAR99
<a href="#">PEWCT1049</a> 	WR-42	18 - 26.5	0.1	1.05:1	30	20	Square Cover UG-595/U	EAR99
<a href="#">PEWCT1050</a> 	WR-42	18 - 26.5	0.1	1.05:1	40	20	Square Cover UG-595/U	EAR99
<a href="#">PEWCT1051</a> 	WR-42	18 - 26.5	0.1	1.05:1	50	10	Square Cover UG-595/U	EAR99
<a href="#">PEWCT1052</a> 	WR-51	15 - 22	0.1	1.05:1	20	20	Square Cover	EAR99
<a href="#">PEWCT1053</a> 	WR-51	15 - 22	0.1	1.05:1	30	30	Square Cover	EAR99
<a href="#">PEWCT1054</a> 	WR-51	15 - 22	0.1	1.05:1	40	30	Square Cover	EAR99
<a href="#">PEWCT1055</a> 	WR-51	15 - 22	0.1	1.05:1	50	10	Square Cover	EAR99
<a href="#">PEWCT1056</a> 	WR-62	12.4 - 18	0.1	1.05:1	20	20	Square Cover UG-419/U	EAR99
<a href="#">PEWCT1057</a> 	WR-62	12.4 - 18	0.1	1.05:1	30	10	Square Cover UG-419/U	EAR99
<a href="#">PEWCT1058</a> 	WR-62	12.4 - 18	0.1	1.05:1	40	30	Square Cover UG-419/U	EAR99
<a href="#">PEWCT1059</a> 	WR-62	12.4 - 18	0.1	1.05:1	50	10	Square Cover UG-419/U	EAR99

## Waveguide Couplers-Crossguide with Termination and WG to Coax Adapter Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCT1060</a> 	WR-75	10 - 15	0.1	1.05:1	20	25	Square Cover	EAR99
<a href="#">PEWCT1064</a> 	WR-75	10 - 15	0.1	1.05:1	20	25	Square Cover	EAR99
<a href="#">PEWCT1061</a> 	WR-75	10 - 15	0.1	1.05:1	30	25	Square Cover	EAR99
<a href="#">PEWCT1065</a> 	WR-75	10 - 15	0.1	1.05:1	30	25	Square Cover	EAR99
<a href="#">PEWCT1062</a> 	WR-75	10 - 15	0.1	1.05:1	40	15	Square Cover	EAR99
<a href="#">PEWCT1066</a> 	WR-75	10 - 15	0.1	1.05:1	40	15	Square Cover	EAR99
<a href="#">PEWCT1063</a> 	WR-75	10 - 15	0.1	1.05:1	50	10	Square Cover	EAR99
<a href="#">PEWCT1067</a> 	WR-75	10 - 15	0.1	1.05:1	50	10	Square Cover	EAR99
<a href="#">PEWCT1068</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	20	20	Square Cover UG-39/U	EAR99
<a href="#">PEWCT1076</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	20	20	Square Cover UG-39/U	EAR99
<a href="#">PEWCT1072</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	20	25	CPR-90G	EAR99
<a href="#">PEWCT1080</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	20	25	CPR-90G	EAR99
<a href="#">PEWCT1073</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	30	20	CPR-90G	EAR99
<a href="#">PEWCT1081</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	30	20	CPR-90G	EAR99
<a href="#">PEWCT1069</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	30	20	Square Cover UG-39/U	EAR99
<a href="#">PEWCT1077</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	30	20	Square Cover UG-39/U	EAR99

## Waveguide Couplers-Crossguide with Termination and WG to Coax Adapter Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCT1074</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	40	10	CPR-90G	EAR99
<a href="#">PEWCT1082</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	40	10	CPR-90G	EAR99
<a href="#">PEWCT1070</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	40	10	Square Cover UG-39/U	EAR99
<a href="#">PEWCT1078</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	40	10	Square Cover UG-39/U	EAR99
<a href="#">PEWCT1075</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	50	10	CPR-90G	EAR99
<a href="#">PEWCT1083</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	50	10	CPR-90G	EAR99
<a href="#">PEWCT1071</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	50	10	Square Cover UG-39/U	EAR99
<a href="#">PEWCT1079</a> 	WR-90	8.2 - 12.4	0.1	1.05:1	50	10	Square Cover UG-39/U	EAR99
<a href="#">PEWCT1088</a> 	WR-112	7.05 - 10	0.1	1.05:1	20	25	CPR-112G	EAR99
<a href="#">PEWCT1096</a> 	WR-112	7.05 - 10	0.1	1.05:1	20	25	CPR-112G	EAR99
<a href="#">PEWCT1084</a> 	WR-112	7.05 - 10	0.1	1.05:1	20	45	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1092</a> 	WR-112	7.05 - 10	0.1	1.05:1	20	45	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1089</a> 	WR-112	7.05 - 10	0.1	1.05:1	30	25	CPR-112G	EAR99
<a href="#">PEWCT1097</a> 	WR-112	7.05 - 10	0.1	1.05:1	30	25	CPR-112G	EAR99
<a href="#">PEWCT1085</a> 	WR-112	7.05 - 10	0.1	1.05:1	30	25	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1093</a> 	WR-112	7.05 - 10	0.1	1.05:1	30	25	Square Cover UG-51/U	EAR99







## Waveguide Couplers-Crossguide with Termination and WG to Coax Adapter Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCT1090</a> 	WR-112	7.05 - 10	0.1	1.05:1	40	20	CPR-112G	EAR99
<a href="#">PEWCT1098</a> 	WR-112	7.05 - 10	0.1	1.05:1	40	20	CPR-112G	EAR99
<a href="#">PEWCT1086</a> 	WR-112	7.05 - 10	0.1	1.05:1	40	20	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1094</a> 	WR-112	7.05 - 10	0.1	1.05:1	40	20	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1091</a> 	WR-112	7.05 - 10	0.1	1.05:1	50	10	CPR-112G	EAR99
<a href="#">PEWCT1099</a> 	WR-112	7.05 - 10	0.1	1.05:1	50	10	CPR-112G	EAR99
<a href="#">PEWCT1087</a> 	WR-112	7.05 - 10	0.1	1.05:1	50	10	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1095</a> 	WR-112	7.05 - 10	0.1	1.05:1	50	10	Square Cover UG-51/U	EAR99
<a href="#">PEWCT1104</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	20	20	CPR-137G	EAR99
<a href="#">PEWCT1112</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	20	20	CPR-137G	EAR99
<a href="#">PEWCT1100</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	20	25	Round Cover UG-344/U	EAR99
<a href="#">PEWCT1108</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	20	25	Round Cover UG-344/U	EAR99
<a href="#">PEWCT1105</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	30	20	CPR-137G	EAR99
<a href="#">PEWCT1113</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	30	20	CPR-137G	EAR99
<a href="#">PEWCT1101</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	30	20	Round Cover UG-344/U	EAR99
<a href="#">PEWCT1109</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	30	20	Round Cover UG-344/U	EAR99



## Waveguide Couplers-Crossguide with Termination and WG to Coax Adapter Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Coupling (dB)	Directivity (dB)	Flange Type	ECCN
<a href="#">PEWCT1106</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	40	20	CPR-137G	EAR99
<a href="#">PEWCT1114</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	40	20	CPR-137G	EAR99
<a href="#">PEWCT1102</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	40	20	Round Cover UG-344/U	EAR99
<a href="#">PEWCT1110</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	40	20	Round Cover UG-344/U	EAR99
<a href="#">PEWCT1107</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	50	10	CPR-137G	EAR99
<a href="#">PEWCT1115</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	50	10	CPR-137G	EAR99
<a href="#">PEWCT1103</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	50	10	Round Cover UG-344/U	EAR99
<a href="#">PEWCT1111</a> 	WR-137	5.85 - 8.2	0.1	1.05:1	50	10	Round Cover UG-344/U	EAR99







## Waveguide Direct Read Attenuators

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum Attenuation (dB)	Insertion Loss (dB)	Maximum VSWR	Input Power (Watts)	Flange Type	ECCN
<a href="#">PE-W10AT5001</a> 	WR-10	75 - 110	50	1	1.2:1	0.2	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W12AT5001</a> 	WR-12	60 - 90	50	0.9	1.2:1	0.2	Round Cover UG-387/U	EAR99
<a href="#">PE-W15AT5001</a> 	WR-15	50 - 75	50	0.8	1.2:1	0.3	Round Cover UG-385/U	EAR99
<a href="#">PE-W19AT5001</a> 	WR-19	40 - 60	50	0.7	1.15:1	0.2	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE-W22AT5001</a> 	WR-22	33 - 50	50	0.6	1.15:1	0.4	Round Cover UG-383/U	EAR99
<a href="#">PE-W22AT5002</a> 	WR-22	33 - 50	60		1.15:1	0.5	Round Cover UG-383/U	EAR99





## Waveguide Direct Read Attenuators Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum Attenuation (dB)	Insertion Loss (dB)	Maximum VSWR	Input Power (Watts)	Flange Type	ECCN
<a href="#">PE-W28AT5001</a> 	WR-28	26.5 - 40	50	0.5	1.15:1	0.5	Square Cover UG-599/U	EAR99
<a href="#">PE-W42AT5001</a> 	WR-42	18 - 26.5	50	0.5	1.15:1	1	Square Cover UG-595/U	EAR99

















## Waveguide Variable Attenuators

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Flange Type	Insertion Loss (dB)	Maximum Attenuators (dB)	ECCN
<a href="#">PE-W10AT001-30</a> 	WR-10	75 - 110	Round Cover UG-387/U-Mod	1	30	EAR99
<a href="#">PE-W10AT002-30</a> 	WR-10	75 - 110	Round Cover UG-387/U-Mod	1	30	EAR99
<a href="#">PE-W12AT001-30</a> 	WR-12	60 - 90	Round Cover UG-387/U	0.9	30	EAR99
<a href="#">PE-W15AT001-30</a> 	WR-15	50 - 75	Round Cover UG-385/U	0.8	30	EAR99
<a href="#">PE-W19AT001-30</a> 	WR-19	40 - 60	Round Cover UG-383/U-Mod	0.6	30	EAR99
<a href="#">PE-W22AT001-30</a> 	WR-22	33 - 50	Round Cover UG-383/U	0.5	30	EAR99

## Flexible Waveguide

















PE P/N	Waveguide Type	Design	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W22SF005-6</a> 	WR-22	Seamless	33 - 50	0.49	1.2:1	6	Round Cover UG-383/U	EAR99
<a href="#">PE-W22SF005-12</a> 	WR-22	Seamless	33 - 50	0.49	1.2:1	12	Round Cover UG-383/U	EAR99
<a href="#">PE-W22SF005-24</a> 	WR-22	Seamless	33 - 50	0.49	1.2:1	24	Round Cover UG-383/U	EAR99
<a href="#">PE-W28SF005-12</a> 	WR-28	Seamless	26.5 - 40	0.49	1.2:1	12	Square Cover UG-599/U	EAR99

## Flexible Waveguide Continued

















PE P/N	Waveguide Type	Design	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W28SF005-24</a> 	WR-28	Seamless	26.5 - 40	0.98	1.2:1	24	Square Cover UG-599/U	EAR99
<a href="#">PE-W28SF005-36</a> 	WR-28	Seamless	26.5 - 40	1.47	1.2:1	36	Square Cover UG-599/U	EAR99
<a href="#">PE-W34SF005-12</a> 	WR-34	Seamless	22 - 33	0.4	1.15:1	12	Square Cover UG-1530/U	EAR99
<a href="#">PE-W34SF005-24</a> 	WR-34	Seamless	22 - 33	0.8	1.15:1	24	Square Cover UG-1530/U	EAR99
<a href="#">PE-W34SF005-36</a> 	WR-34	Seamless	22 - 33	1.2	1.15:1	36	Square Cover UG-1530/U	EAR99
<a href="#">PE-W42SF005-12</a> 	WR-42	Seamless	18 - 26.5	0.27	1.15:1	12	Square Cover UG-595/U	EAR99
<a href="#">PE-W42SF005-24</a> 	WR-42	Seamless	18 - 26.5	0.54	1.15:1	24	Square Cover UG-595/U	EAR99
<a href="#">PE-W42SF005-36</a> 	WR-42	Seamless	18 - 26.5	0.81	1.15:1	36	Square Cover UG-595/U	EAR99
<a href="#">PE-W51SF005-12</a> 	WR-51	Seamless	15 - 22	0.18	1.1:1	12	Square Cover	EAR99
<a href="#">PE-W51SF005-24</a> 	WR-51	Seamless	15 - 22	0.36	1.1:1	24	Square Cover	EAR99
<a href="#">PE-W51SF005-36</a> 	WR-51	Seamless	15 - 22	0.54	1.1:1	36	Square Cover	EAR99
<a href="#">PE-W62SF005-12</a> 	WR-62	Seamless	12.4 - 18	0.14	1.08:1	12	Square Cover UG-419/U	EAR99
<a href="#">PE-W62SF005-24</a> 	WR-62	Seamless	12.4 - 18	0.28	1.08:1	24	Square Cover UG-419/U	EAR99
<a href="#">PE-W62SF005-36</a> 	WR-62	Seamless	12.4 - 18	0.42	1.08:1	36	Square Cover UG-419/U	EAR99
<a href="#">PE-W75SF005-12</a> 	WR-75	Seamless	10 - 15	0.12	1.07:1	12	Square Cover	EAR99
<a href="#">PE-W75SF005-24</a> 	WR-75	Seamless	10 - 15	0.24	1.07:1	24	Square Cover	EAR99



















## Flexible Waveguide Continued

PE P/N	Waveguide Type	Design	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W75SF005-36</a> 	WR-75	Seamless	10 - 15	0.36	1.07:1	36	Square Cover	EAR99
<a href="#">PE-W90SF005-12</a> 	WR-90	Seamless	8.2 - 12.4	0.09	1.07:1	12	Square Cover UG-39/U	EAR99
<a href="#">PE-W90SF006-24</a> 	WR-90	Seamless	8.2 - 12.4	0.18	1.07:1	24	CPR-90G	EAR99
<a href="#">PE-W90SF005-24</a> 	WR-90	Seamless	8.2 - 12.4	0.18	1.07:1	24	Square Cover UG-39/U	EAR99
<a href="#">PE-W90SF006-36</a> 	WR-90	Seamless	8.2 - 12.4	0.27	1.07:1	36	CPR-90G	EAR99
<a href="#">PE-W90SF005-36</a> 	WR-90	Seamless	8.2 - 12.4	0.27	1.07:1	36	Square Cover UG-39/U	EAR99
<a href="#">PE-W90SF006-12</a> 	WR-90	Seamless	8.2 - 12.4	0.9	1.07:1	12	CPR-90G	EAR99
<a href="#">PE-W112SF006-12</a> 	WR-112	Seamless	7.05 - 10	0.08	1.07:1	12	CPR-112G	EAR99
<a href="#">PE-W112SF005-12</a> 	WR-112	Seamless	7.05 - 10	0.08	1.07:1	12	Square Cover UG-51/U	EAR99
<a href="#">PE-W112SF006-24</a> 	WR-112	Seamless	7.05 - 10	0.16	1.07:1	24	CPR-112G	EAR99
<a href="#">PE-W112SF005-24</a> 	WR-112	Seamless	7.05 - 10	0.16	1.07:1	24	Square Cover UG-51/U	EAR99
<a href="#">PE-W112SF006-36</a> 	WR-112	Seamless	7.05 - 10	0.24	1.07:1	36	CPR-112G	EAR99
<a href="#">PE-W112SF005-36</a> 	WR-112	Seamless	7.05 - 10	0.24	1.07:1	36	Square Cover UG-51/U	EAR99
<a href="#">PE-W137SF006-12</a> 	WR-137	Seamless	5.85 - 8.2	0.06	1.07:1	12	CPR-137G	EAR99
<a href="#">PE-W137SF005-12</a> 	WR-137	Seamless	5.85 - 8.2	0.06	1.07:1	12	Round Cover UG-344/U	EAR99
<a href="#">PE-W137SF006-24</a> 	WR-137	Seamless	5.85 - 8.2	0.12	1.07:1	24	CPR-137G	EAR99











## Flexible Waveguide Continued

PE P/N	Waveguide Type	Design	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W137SF005-24</a> 	WR-137	Seamless	5.85 - 8.2	0.12	1.07:1	24	Round Cover UG-344/U	EAR99
<a href="#">PE-W137SF006-36</a> 	WR-137	Seamless	5.85 - 8.2	0.18	1.07:1	36	CPR-137G	EAR99
<a href="#">PE-W137SF005-36</a> 	WR-137	Seamless	5.85 - 8.2	0.18	1.07:1	36	Round Cover UG-344/U	EAR99
<a href="#">PE-W22TF005-6</a> 	WR-22	Twistable	33 - 50	0.6	1.3:1	6	Round Cover UG-383/U	EAR99
<a href="#">PE-W22TF005-12</a> 	WR-22	Twistable	33 - 50	0.6	1.3:1	12	Round Cover UG-383/U	EAR99
<a href="#">PE-W22TF005-24</a> 	WR-22	Twistable	33 - 50	0.6	1.3:1	24	Round Cover UG-383/U	EAR99
<a href="#">PE-W28TF005-12</a> 	WR-28	Twistable	26.5 - 40	0.6	1.3:1	12	Square Cover UG-599/U	EAR99
<a href="#">PE-W28TF005-24</a> 	WR-28	Twistable	26.5 - 40	1.2	1.3:1	24	Square Cover UG-599/U	EAR99
<a href="#">PE-W28TF005-36</a> 	WR-28	Twistable	26.5 - 40	1.8	1.3:1	36	Square Cover UG-599/U	EAR99
<a href="#">PE-W34TF005-12</a> 	WR-34	Twistable	22 - 33	0.5	1.22:1	12	Square Cover UG-1530/U	EAR99
<a href="#">PE-W34TF005-24</a> 	WR-34	Twistable	22 - 33	1	1.22:1	24	Square Cover UG-1530/U	EAR99
<a href="#">PE-W34TF005-36</a> 	WR-34	Twistable	22 - 33	1.5	1.22:1	36	Square Cover UG-1530/U	EAR99
<a href="#">PE-W42TF005-12</a> 	WR-42	Twistable	18 - 26.5	0.35	1.3:1	12	Square Cover UG-595/U	EAR99
<a href="#">PE-W42TF005-24</a> 	WR-42	Twistable	18 - 26.5	0.7	1.3:1	24	Square Cover UG-595/U	EAR99
<a href="#">PE-W42TF005-36</a> 	WR-42	Twistable	18 - 26.5	1.05	1.35:1	36	Square Cover UG-595/U	EAR99
<a href="#">PE-W51TF005-12</a> 	WR-51	Twistable	15 - 22	0.55	1.15:1	12	Square Cover	EAR99





## Flexible Waveguide Continued

PE P/N	Waveguide Type	Design	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W51TF005-24</a> 	WR-51	Twistable	15 - 22	1.1	1.15:1	24	Square Cover	EAR99
<a href="#">PE-W51TF005-36</a> 	WR-51	Twistable	15 - 22	1.65	1.15:1	36	Square Cover	EAR99
<a href="#">PE-W62TF005-12</a> 	WR-62	Twistable	12.4 - 18	0.28	1.1:1	12	Square Cover UG-419/U	EAR99
<a href="#">PE-W62TF005-24</a> 	WR-62	Twistable	12.4 - 18	0.56	1.1:1	24	Square Cover UG-419/U	EAR99
<a href="#">PE-W62TF005-36</a> 	WR-62	Twistable	12.4 - 18	0.84	1.1:1	36	Square Cover UG-419/U	EAR99
<a href="#">PE-W75TF005-12</a> 	WR-75	Twistable	10 - 15	0.18	1.1:1	12	Square Cover	EAR99
<a href="#">PE-W75TF005-24</a> 	WR-75	Twistable	10 - 15	0.36	1.1:1	24	Square Cover	EAR99
<a href="#">PE-W75TF005-36</a> 	WR-75	Twistable	10 - 15	0.54	1.1:1	36	Square Cover	EAR99
<a href="#">PE-W90TF006-12</a> 	WR-90	Twistable	8.2 - 12.4	0.15	1.07:1	12	CPR-90G	EAR99
<a href="#">PE-W90TF005-12</a> 	WR-90	Twistable	8.2 - 12.4	0.15	1.1:1	12	Square Cover UG-39/U	EAR99
<a href="#">PE-W90TF006-24</a> 	WR-90	Twistable	8.2 - 12.4	0.3	1.07:1	24	CPR-90G	EAR99
<a href="#">PE-W90TF005-24</a> 	WR-90	Twistable	8.2 - 12.4	0.36	1.1:1	24	Square Cover UG-39/U	EAR99
<a href="#">PE-W90TF006-36</a> 	WR-90	Twistable	8.2 - 12.4	0.45	1.07:1	36	CPR-90G	EAR99
<a href="#">PE-W90TF005-36</a> 	WR-90	Twistable	8.2 - 12.4	0.45	1.1:1	36	Square Cover UG-39/U	EAR99
<a href="#">PE-W112TF006-12</a> 	WR-112	Twistable	7.05 - 10	0.12	1.07:1	12	CPR-112G	EAR99
<a href="#">PE-W112TF005-12</a> 	WR-112	Twistable	7.05 - 10	0.12	1.3:1	12	Square Cover UG-51/U	EAR99



## Flexible Waveguide Continued

PE P/N	Waveguide Type	Design	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W112TF006-24</a> 	WR-112	Twistable	7.05 - 10	0.24	1.07:1	24	CPR-112G	EAR99
<a href="#">PE-W112TF005-24</a> 	WR-112	Twistable	7.05 - 10	0.24	1.07:1	24	Square Cover UG-51/U	EAR99
<a href="#">PE-W112TF006-36</a> 	WR-112	Twistable	7.05 - 10	0.36	1.07:1	36	CPR-112G	EAR99
<a href="#">PE-W112TF005-36</a> 	WR-112	Twistable	7.05 - 10	0.36	1.07:1	36	Square Cover UG-51/U	EAR99
<a href="#">PE-W137TF006-12</a> 	WR-137	Twistable	5.85 - 8.2	0.07	1.05:1	12	CPR-137G	EAR99
<a href="#">PE-W137TF005-12</a> 	WR-137	Twistable	5.85 - 8.2	0.07	1.05:1	12	Round Cover UG-344/U	EAR99
<a href="#">PE-W137TF006-24</a> 	WR-137	Twistable	5.85 - 8.2	0.14	1.05:1	24	CPR-137G	EAR99
<a href="#">PE-W137TF005-24</a> 	WR-137	Twistable	5.85 - 8.2	0.14	1.05:1	24	Round Cover UG-344/U	EAR99
<a href="#">PE-W137TF005-36</a> 	WR-137	Twistable	5.85 - 8.2	0.18	1.05:1	36	Round Cover UG-344/U	EAR99
<a href="#">PE-W137TF006-36</a> 	WR-137	Twistable	5.85 - 8.2	0.21	1.05:1	36	CPR-137G	EAR99













## Specialty Waveguide Antennas

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange/Connector Type	ECCN
<a href="#">PE9887-11</a> 	Broadband	1 - 18		SMA Female Connector	EAR99
<a href="#">PE9888-11</a> 	Broadband	1 - 18		N Female Connector	EAR99
<a href="#">PE9881-42</a> 	WR-15	50 - 75	42	Round Cover	5A991
<a href="#">PE9881A-20</a> 	WR-15	50 - 75	20	Round Cover	EAR99
















## Specialty Waveguide Antennas Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PE9881-34</a> 	WR-15	56.5 - 67		Round Cover	5A991
<a href="#">PE-W15A001</a> 	WR-15	58 - 63	0	Round Cover	EAR99

















## Waveguide Antennas with Coax Adapters

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	Connector	ECCN
<a href="#">PE9850/2F-10</a> 	WR-28	26.5 - 40	10	WR-28	2.92mm Female	EAR99
<a href="#">PE9850/2F-15</a> 	WR-28	26.5 - 40	15	WR-28	2.92mm Female	EAR99
<a href="#">PE9850/2F-20</a> 	WR-28	26.5 - 40	20	WR-28	2.92mm Female	EAR99
<a href="#">PE9851/2F-10</a> 	WR-34	22 - 33	10	WR-34	2.92mm Female	EAR99
<a href="#">PE9851/2F-15</a> 	WR-34	22 - 33	15	WR-34	2.92mm Female	EAR99
<a href="#">PE9851/2F-20</a> 	WR-34	22 - 33	20	WR-34	2.92mm Female	EAR99
<a href="#">PE9852/2F-10</a> 	WR-42	18 - 26.5	10	WR-42	2.92mm Female	EAR99
<a href="#">PE9852/2F-15</a> 	WR-42	18 - 26.5	15	WR-42	2.92mm Female	EAR99
<a href="#">PE9852/2F-20</a> 	WR-42	18 - 26.5	20	WR-42	2.92mm Female	EAR99
<a href="#">PE9853/SF-10</a> 	WR-51	15 - 22	10	WR-51	SMA Female	EAR99
<a href="#">PE9853/SF-15</a> 	WR-51	15 - 22	15	WR-51	SMA Female	EAR99
<a href="#">PE9853/SF-20</a> 	WR-51	15 - 22	20	WR-51	SMA Female	EAR99

















## Waveguide Antennas with Coax Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	Connector	ECCN
<a href="#">PE9854/NF-10</a> 	WR-62	12.4 - 18	10	WR-62	N Female	EAR99
<a href="#">PE9854/NF-15</a> 	WR-62	12.4 - 18	15	WR-62	N Female	EAR99
<a href="#">PE9854/NF-20</a> 	WR-62	12.4 - 18	20	WR-62	N Female	EAR99
<a href="#">PE9854/SF-10</a> 	WR-62	12.4 - 18	10	WR-62	SMA Female	EAR99
<a href="#">PE9854/SF-15</a> 	WR-62	12.4 - 18	15	WR-62	SMA Female	EAR99
<a href="#">PE9854/SF-20</a> 	WR-62	12.4 - 18	20	WR-62	SMA Female	EAR99
<a href="#">PE9855/NF-10</a> 	WR-75	10 - 15	10	WR-75	N Female	EAR99
<a href="#">PE9855/NF-15</a> 	WR-75	10 - 15	15	WR-75	N Female	EAR99
<a href="#">PE9855/NF-20</a> 	WR-75	10 - 15	20	WR-75	N Female	EAR99
<a href="#">PE9855/SF-10</a> 	WR-75	10 - 15	10	WR-75	SMA Female	EAR99
<a href="#">PE9855/SF-15</a> 	WR-75	10 - 15	15	WR-75	SMA Female	EAR99
<a href="#">PE9855/SF-20</a> 	WR-75	10 - 15	20	WR-75	SMA Female	EAR99
<a href="#">PE9856/NF-10</a> 	WR-90	8.2 - 12.4	10	WR-90	N Female	EAR99
<a href="#">PE9856/NF-15</a> 	WR-90	8.2 - 12.4	15	WR-90	N Female	EAR99
<a href="#">PE9856/NF-20</a> 	WR-90	8.2 - 12.4	20	WR-90	N Female	EAR99

## Waveguide Antennas with Coax Adapters Continued
















PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	Connector	ECCN
<a href="#">PE9856/SF-10</a> 	WR-90	8.2 - 12.4	10	WR-90	SMA Female	EAR99
<a href="#">PE9856/SF-15</a> 	WR-90	8.2 - 12.4	15	WR-90	SMA Female	EAR99
<a href="#">PE9856/SF-20</a> 	WR-90	8.2 - 12.4	20	WR-90	SMA Female	EAR99
<a href="#">PE9857/NF-10</a> 	WR-102	7 - 11	10	WR-102	N Female	EAR99
<a href="#">PE9857/NF-15</a> 	WR-102	7 - 11	15	WR-102	N Female	EAR99
<a href="#">PE9857/NF-20</a> 	WR-102	7 - 11	20	WR-102	N Female	EAR99
<a href="#">PE9857/SF-10</a> 	WR-102	7 - 11	10	WR-102	SMA Female	EAR99
<a href="#">PE9857/SF-15</a> 	WR-102	7 - 11	15	WR-102	SMA Female	EAR99
<a href="#">PE9857/SF-20</a> 	WR-102	7 - 11	20	WR-102	SMA Female	EAR99
<a href="#">PE9858/NF-10</a> 	WR-112	7.05 - 10	10	WR-112	N Female	EAR99
<a href="#">PE9858/NF-15</a> 	WR-112	7.05 - 10	15	WR-112	N Female	EAR99
<a href="#">PE9858/NF-20</a> 	WR-112	7.05 - 10	20	WR-112	N Female	EAR99
<a href="#">PE9858/SF-10</a> 	WR-112	7.05 - 10	10	WR-112	SMA Female	EAR99
<a href="#">PE9858/SF-15</a> 	WR-112	7.05 - 10	15	WR-112	SMA Female	EAR99
<a href="#">PE9858/SF-20</a> 	WR-112	7.05 - 10	20	WR-112	SMA Female	EAR99
<a href="#">PE9859/NF-10</a> 	WR-137	5.85 - 8.2	10	WR-137	N Female	EAR99

## Waveguide Antennas with Coax Adapters Continued

















PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	Connector	ECCN
<a href="#">PE9859/NF-15</a> 	WR-137	5.85 - 8.2	15	WR-137	N Female	EAR99
<a href="#">PE9859/NF-20</a> 	WR-137	5.85 - 8.2	20	WR-137	N Female	EAR99
<a href="#">PE9859/SF-10</a> 	WR-137	5.85 - 8.2	10	WR-137	SMA Female	EAR99
<a href="#">PE9859/SF-15</a> 	WR-137	5.85 - 8.2	15	WR-137	SMA Female	EAR99
<a href="#">PE9859/SF-20</a> 	WR-137	5.85 - 8.2	20	WR-137	SMA Female	EAR99
<a href="#">PE9860/NF-10</a> 	WR-159	4.9 - 7.05	10	WR-159	N Female	EAR99
<a href="#">PE9860/NF-15</a> 	WR-159	4.9 - 7.05	15	WR-159	N Female	EAR99
<a href="#">PE9860/NF-20</a> 	WR-159	4.9 - 7.05	20	WR-159	N Female	EAR99
<a href="#">PE9860/SF-10</a> 	WR-159	4.9 - 7.05	10	WR-159	SMA Female	EAR99
<a href="#">PE9860/SF-15</a> 	WR-159	4.9 - 7.05	15	WR-159	SMA Female	EAR99
<a href="#">PE9860/SF-20</a> 	WR-159	4.9 - 7.05	20	WR-159	SMA Female	EAR99
<a href="#">PE9861/NF-10</a> 	WR-187	3.95 - 5.85	10	WR-187	N Female	EAR99
<a href="#">PE9861/NF-15</a> 	WR-187	3.95 - 5.85	15	WR-187	N Female	EAR99
<a href="#">PE9861/NF-20</a> 	WR-187	3.95 - 5.85	20	WR-187	N Female	EAR99
<a href="#">PE9861/SF-10</a> 	WR-187	3.95 - 5.85	10	WR-187	SMA Female	EAR99
<a href="#">PE9861/SF-15</a> 	WR-187	3.95 - 5.85	15	WR-187	SMA Female	EAR99



## Waveguide Antennas with Coax Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	Connector	ECCN
<a href="#">PE9861/SF-20</a> 	WR-187	3.95 - 5.85	20	WR-187	SMA Female	EAR99
<a href="#">PE9862/NF-15</a> 	WR-229	3.3 - 4.9	15	WR-229	N Female	EAR99
<a href="#">PE9862/NF-20</a> 	WR-229	3.3 - 4.9	20	WR-229	N Female	EAR99
<a href="#">PE9862/SF-15</a> 	WR-229	3.3 - 4.9	15	WR-229	SMA Female	EAR99
<a href="#">PE9862/SF-20</a> 	WR-229	3.3 - 4.9	20	WR-229	SMA Female	EAR99
<a href="#">PE9863/NF-10</a> 	WR-284	2.6 - 3.95	10	WR-284	N Female	EAR99
<a href="#">PE9863/NF-20</a> 	WR-284	2.6 - 3.95	20	WR-284	N Female	EAR99
<a href="#">PE9863/SF-10</a> 	WR-284	2.6 - 3.95	10	WR-284	SMA Female	EAR99
<a href="#">PE9863/SF-20</a> 	WR-284	2.6 - 3.95	20	WR-284	SMA Female	EAR99
<a href="#">PE9864/NF-10</a> 	WR-430	1.7 - 2.6	10	WR-430	N Female	EAR99
<a href="#">PE9864/NF-15</a> 	WR-430	1.7 - 2.6	15	WR-430	N Female	EAR99
<a href="#">PE9864/NF-20</a> 	WR-430	1.7 - 2.6	20	WR-430	N Female	EAR99
<a href="#">PE9864/SF-10</a> 	WR-430	1.7 - 2.6	10	WR-430	SMA Female	EAR99
<a href="#">PE9864/SF-15</a> 	WR-430	1.7 - 2.6	15	WR-430	SMA Female	EAR99
<a href="#">PE9864/SF-20</a> 	WR-430	1.7 - 2.6	20	WR-430	SMA Female	EAR99













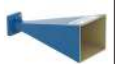



## Standard Gain Horns

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1029</a> 	WR-5	140 - 220	10	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1030</a> 	WR-5	140 - 220	15	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1031</a> 	WR-5	140 - 220	20	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1032</a> 	WR-5	140 - 220	25	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1025</a> 	WR-6	110 - 170	10	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1026</a> 	WR-6	110 - 170	15	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1027</a> 	WR-6	110 - 170	20	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1028</a> 	WR-6	110 - 170	25	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1021</a> 	WR-8	90 - 140	10	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1022</a> 	WR-8	90 - 140	15	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1023</a> 	WR-8	90 - 140	20	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1024</a> 	WR-8	90 - 140	25	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1017</a> 	WR-10	75 - 110	10	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1018</a> 	WR-10	75 - 110	15	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1019</a> 	WR-10	75 - 110	20	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1020</a> 	WR-10	75 - 110	25	Round Cover UG-387/U-Mod	EAR99





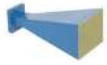











## Standard Gain Horns Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1013</a> 	WR-12	60 - 90	10	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1014</a> 	WR-12	60 - 90	15	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1015</a> 	WR-12	60 - 90	20	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1016</a> 	WR-12	60 - 90	25	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1009</a> 	WR-15	50 - 75	10	Round Cover UG-385/U-Mod	EAR99
<a href="#">PEWAN1010</a> 	WR-15	50 - 75	15	Round Cover UG-385/U-Mod	EAR99
<a href="#">PEWAN1011</a> 	WR-15	50 - 75	20	Round Cover UG-385/U-Mod	EAR99
<a href="#">PE9881-24</a> 	WR-15	50 - 75	24	Round Cover UG-385/U	5A991
<a href="#">PEWAN1012</a> 	WR-15	50 - 75	25	Round Cover UG-385/U-Mod	EAR99
<a href="#">PEWAN1005</a> 	WR-19	40 - 60	10	Round Cover UG-383/U-Mod	EAR99
<a href="#">PEWAN1006</a> 	WR-19	40 - 60	15	Round Cover UG-383/U-Mod	EAR99
<a href="#">PEWAN1007</a> 	WR-19	40 - 60	20	Round Cover UG-383/U-Mod	EAR99
<a href="#">PEWAN1008</a> 	WR-19	40 - 60	25	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE9850-10</a> 	WR-28	26.5 - 40	10	Square Cover UG-599/U	EAR99
<a href="#">PE9850-15</a> 	WR-28	26.5 - 40	15	Square Cover UG-599/U	EAR99
<a href="#">PE9850-20</a> 	WR-28	26.5 - 40	20	Square Cover UG-599/U	EAR99












## Standard Gain Horns Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PE9851-10</a> 	WR-34	22 - 33	10	Square Cover UG-1530/U	EAR99
<a href="#">PE9851A-15</a> 	WR-34	22 - 33	15	Square Cover UG-1530/U	EAR99
<a href="#">PE9851A-20</a> 	WR-34	22 - 33	20	Square Cover UG-1530/U	EAR99
<a href="#">PE9852-10</a> 	WR-42	18 - 26.5	10	Square Cover UG-597/U	EAR99
<a href="#">PE9852A-15</a> 	WR-42	18 - 26.5	15	Square Cover UG-597/U	EAR99
<a href="#">PE9852-20</a> 	WR-42	18 - 26.5	20	Square Cover UG-597/U	EAR99
<a href="#">PE9853-10</a> 	WR-51	15 - 22	10	Square Cover	EAR99
<a href="#">PE9853-15</a> 	WR-51	15 - 22	15	Square Cover	EAR99
<a href="#">PE9853-20</a> 	WR-51	15 - 22	20	Square Cover	EAR99
<a href="#">PE9853A-20</a> 	WR-51	15 - 22	20	Square Cover	EAR99
<a href="#">PE9854-10</a> 	WR-62	12.4 - 18	10	Square Cover	EAR99
<a href="#">PE9854-15</a> 	WR-62	12.4 - 18	15	Square Cover	EAR99
<a href="#">PE9854-20</a> 	WR-62	12.4 - 18	20	Square Cover	EAR99
<a href="#">PE9855-10</a> 	WR-75	10 - 15	10	Square Cover	EAR99
<a href="#">PE9855-15</a> 	WR-75	10 - 15	15	Square Cover	EAR99
<a href="#">PE9855A-20</a> 	WR-75	10 - 15	20	Square Cover	EAR99




## Standard Gain Horns Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PE9856-10</a> 	WR-90	8.2 - 12.4	10	Square Cover UG-135/U	EAR99
<a href="#">PE9856-15</a> 	WR-90	8.2 - 12.4	15	Square Cover UG-135/U	EAR99
<a href="#">PE9856-20</a> 	WR-90	8.2 - 12.4	20	Square Cover UG-135/U	EAR99
<a href="#">PE9857-10</a> 	WR-102	7 - 11	10	Square Cover	EAR99
<a href="#">PE9857-15</a> 	WR-102	7 - 11	15	Square Cover	EAR99
<a href="#">PE9857-20</a> 	WR-102	7 - 11	20	Square Cover	EAR99
<a href="#">PE9858-10</a> 	WR-112	7.05 - 10	10	Square Cover	EAR99
<a href="#">PE9858-15</a> 	WR-112	7.05 - 10	15	Square Cover	EAR99
<a href="#">PE9858A-20</a> 	WR-112	7.05 - 10	20	Square Cover	EAR99
<a href="#">PE9859-10</a> 	WR-137	5.85 - 8.2	10	CMR-137	EAR99
<a href="#">PE9859-15</a> 	WR-137	5.85 - 8.2	15	CMR-137	EAR99
<a href="#">PE9859-20</a> 	WR-137	5.85 - 8.2	20	CMR-137	EAR99
<a href="#">PE9860-10</a> 	WR-159	4.9 - 7.05	10	CMR-159	EAR99
<a href="#">PE9860-15</a> 	WR-159	4.9 - 7.05	15	Square Cover UG-1731/U	EAR99
<a href="#">PE9860-20</a> 	WR-159	4.9 - 7.05	20	CMR-159	EAR99
<a href="#">PE9861-10</a> 	WR-187	3.95 - 5.85	10	CMR-187	EAR99

















## Standard Gain Horns Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PE9861-15</a> 	WR-187	3.95 - 5.85	15	CMR-187	EAR99
<a href="#">PE9861-20</a> 	WR-187	3.95 - 5.85	20	CMR-187	EAR99
<a href="#">PE-W229AN001</a> 	WR-229	3.3 - 4.9	10	CMR-229	EAR99
<a href="#">PE9862-15</a> 	WR-229	3.3 - 4.9	15	CMR-229	EAR99
<a href="#">PE9862-20</a> 	WR-229	3.3 - 4.9	20	CMR-229	EAR99
<a href="#">PE9863-10</a> 	WR-284	2.6 - 3.95	10	CMR-284	EAR99
<a href="#">PEWAN1001</a> 	WR-284	2.6 - 3.95	15	CMR-284	EAR99
<a href="#">PE9863-20</a> 	WR-284	2.6 - 3.95	20	CMR-284	EAR99
<a href="#">PE9864-10</a> 	WR-430	1.7 - 2.6	10	CPR-430F	EAR99
<a href="#">PE9864-15</a> 	WR-430	1.7 - 2.6	15	CPR-430F	EAR99
<a href="#">PE9864-20</a> 	WR-430	1.7 - 2.6	20	CPR-430F	EAR99

















## Conical Gain Horns

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1065</a> 	WR-5	140 - 220	10	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1066</a> 	WR-5	140 - 220	15	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1067</a> 	WR-5	140 - 220	20	Round Cover UG-387/U	EAR99

## Conical Gain Horns Continued


PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1068</a> 	WR-5	140 - 220	25	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1061</a> 	WR-6	100 - 112	10	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1062</a> 	WR-6	100 - 112	15	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1063</a> 	WR-6	100 - 112	20	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1064</a> 	WR-6	100 - 112	25	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1057</a> 	WR-8	100 - 112	10	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1058</a> 	WR-8	100 - 112	15	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1059</a> 	WR-8	100 - 112	20	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1060</a> 	WR-8	100 - 112	25	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1053</a> 	WR-10	77 - 87	10	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1054</a> 	WR-10	77 - 87	15	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1055</a> 	WR-10	77 - 87	20	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1056</a> 	WR-10	77 - 87	25	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1049</a> 	WR-10	87 - 100	10	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1050</a> 	WR-10	87 - 100	15	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1051</a> 	WR-10	87 - 100	20	Round Cover UG-387/U	EAR99

## Conical Gain Horns Continued














PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1052</a> 	WR-10	87 - 100	25	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1041</a> 	WR-12	68 - 77	10	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1042</a> 	WR-12	68 - 77	15	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1043</a> 	WR-12	68 - 77	20	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1044</a> 	WR-12	68 - 77	25	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1045</a> 	WR-12	77 - 87	10	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1046</a> 	WR-12	77 - 87	15	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1047</a> 	WR-12	77 - 87	20	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1048</a> 	WR-12	77 - 87	25	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1037</a> 	WR-15	58 - 68	10	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1038</a> 	WR-15	58 - 68	15	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1039</a> 	WR-15	58 - 68	20	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1040</a> 	WR-15	58 - 68	25	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1033</a> 	WR-19	50 - 58	10	Round Cover UG-383/U-Mod	EAR99
<a href="#">PEWAN1034</a> 	WR-19	50 - 58	15	Round Cover UG-383/U-Mod	EAR99
<a href="#">PEWAN1035</a> 	WR-19	50 - 58	20	Round Cover UG-383/U-Mod	EAR99





## Conical Gain Horns Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1036</a> 	WR-19	50 - 58	25	Round Cover UG-383/U-Mod	EAR99












## Wide Angle Scalar Feed Horns

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1110</a> 		24 - 33	16	Square Cover UG-1530/U	EAR99
<a href="#">PEWAN1113</a> 	WR-28	26 - 30	17	Square Cover UG-599/U	EAR99
<a href="#">PEWAN1114</a> 		26 - 33	17	Square Cover UG-599/U	EAR99
<a href="#">PEWAN1115</a> 		33 - 38.5	17	Square Cover UG-599/U	EAR99
<a href="#">PEWAN1069</a> 	WR-15	55 - 65	10	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1070</a> 	WR-15	55 - 65	10	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1118</a> 		58 - 68	17	Round Cover UG-385/U-Mod	EAR99
<a href="#">PEWAN1120</a> 		68 - 77	17	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1071</a> 	WR-12	72 - 82	10	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1072</a> 	WR-12	72 - 82	10	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1122</a> 		77 - 87	17	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1123</a> 		87 - 100	17	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1073</a> 	WR-10	89 - 99	10	Round Cover UG-385/U-Mod	EAR99



## Wide Angle Scalar Feed Horns Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1074</a> 	WR-10	89 - 99	10	Round Cover UG-385/U-Mod	EAR99
<a href="#">PEWAN1109</a> 		100 - 112	17	Round Cover UG-387/U-Mod	EAR99








## Lens Gain Horns

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1083</a> 	WR-10	89 - 99	34	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1085</a> 	WR-10	89 - 99	34	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1084</a> 	WR-10	89 - 99	40	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1086</a> 	WR-10	89 - 99	40	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1079</a> 	WR-12	72 - 82	32	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1081</a> 	WR-12	72 - 82	32	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1080</a> 	WR-12	72 - 82	37	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1082</a> 	WR-12	72 - 82	37	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1075</a> 	WR-15	55 - 65	32	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1077</a> 	WR-15	55 - 65	32	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1076</a> 	WR-15	55 - 65	37	Round Cover UG-385/U	EAR99



## Lens Gain Horns Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1078</a> 	WR-15	55 - 65	37	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1102</a> 		88 - 100	48	Square Cover UG-387/U-Mod	EAR99








## Omni Directional

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1089</a> 	WR-10	89 - 99	2	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1135</a> 	WR-10	90 - 100	0	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1136</a> 	WR-10	90 - 100	6.5	Square Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1134</a> 	WR-12	71 - 86	2	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1088</a> 	WR-12	75 - 79	2	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1087</a> 	WR-15	58 - 62	3.5	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1133</a> 	WR-28	26.5 - 40	7.5	Square Cover UG-599/U	EAR99



## Probe Waveguide Antennas

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1124</a> 	WR-6	110 - 170	6.5	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1125</a> 	WR-8	90 - 140	6.5	Round Cover UG-387/U-Mod	EAR99



## Probe Waveguide Antennas Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1126</a> 	WR-10	75 - 110	6.5	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1127</a> 	WR-12	60 - 90	6.5	Round Cover UG-387/U	EAR99
<a href="#">PEWAN1128</a> 	WR-15	50 - 75	6.5	Round Cover UG-385/U	EAR99
<a href="#">PEWAN1129</a> 	WR-19	40 - 60	6.5	Round Cover UG-383/U-Mod	EAR99
<a href="#">PEWAN1130</a> 	WR-22	33 - 50	6.5	Round Cover UG-383/U	EAR99
<a href="#">PEWAN1131</a> 	WR-28	26.5 - 40	6.5	Square Cover UG-599/U	EAR99
<a href="#">PEWAN1132</a> 	WR-34	22 - 33	6.5	Square Cover UG-1530/U	EAR99











## Sector Waveguide Antennas

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1143</a> 	WR-28	27.5 - 29.5	6	Square Cover UG-599/U	EAR99
<a href="#">PEWAN1144</a> 	WR-28	30 - 40	0	Square Cover UG-599/U-Mod	EAR99




## Dual Polarized Waveguide Antennas

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1121</a> 	WR-10	75 - 110	13	UG-387/U-Mod	EAR99
<a href="#">PEWAN1137</a> 	WR-10	75 - 110	15	Square Cover UG-387/U-Mod	EAR99

## Dual Polarized Waveguide Antennas Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Gain (dB)	Flange Type	ECCN
<a href="#">PEWAN1141</a> 	WR-10	75 - 110	20	Square Cover UG-387/U-Mod	EAR99
<a href="#">PEWAN1139</a> 	WR-12	50 - 75	15	Square Cover UG-385/U	EAR99
<a href="#">PEWAN1119</a> 	WR-12	60 - 90	13	UG-387/U	EAR99
<a href="#">PEWAN1138</a> 	WR-12	60 - 90	15	Square Cover UG-387/U	EAR99
<a href="#">PEWAN1117</a> 	WR-15	50 - 75	13	UG-385/U-Mod	EAR99
<a href="#">PEWAN1116</a> 	WR-19	40 - 60	13	UG-383/U-Mod	EAR99
<a href="#">PEWAN1140</a> 	WR-22	33 - 50	15	Square Cover UG-383/U	EAR99
<a href="#">PEWAN1111</a> 	WR-28	24 - 40	15	UG-599/U	EAR99
<a href="#">PEWAN1142</a> 	WR-28	24 - 42	10	Square Choke UG-599/U	EAR99
<a href="#">PEWAN1112</a> 	WR-28	24 - 42	15	UG-599/U	EAR99

## Waveguide to Coax Adapters

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PE-W10CA003</a> 	WR-10	75 - 110	1.32:1	Round Cover UG-387/U-Mod	1.0mm Female	EAR99
<a href="#">PE-W10CA001</a> 	WR-10	75 - 110	1.9:1	Round Cover UG-387/U-Mod	1.0mm Female	EAR99
<a href="#">PE-W10CA002</a> 	WR-10	75 - 110	1.9:1	Round Cover UG-387/U-Mod	1.0mm Male	EAR99
















## Waveguide to Coax Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PE-W12CA001</a> 	WR-12	60 - 90	1.67:1	Round Cover UG-387/U	1.0mm Female	EAR99
<a href="#">PE-W12CA002</a> 	WR-12	60 - 90	1.67:1	Round Cover UG-387/U	1.0mm Male	EAR99
<a href="#">PE-W15CA001</a> 	WR-15	50 - 65	1.44:1	Round Cover UG-385/U	1.85mm Female	EAR99
<a href="#">PE-W15CA002</a> 	WR-15	50 - 65	1.44:1	Round Cover UG-385/U	1.85mm Male	EAR99
<a href="#">PE-W19CA001</a> 	WR-19	40 - 60	1.38:1	Round Cover UG-383/U-Mod	1.85mm Female	EAR99
<a href="#">PE-W19CA002</a> 	WR-19	40 - 60	1.38:1	Round Cover UG-383/U-Mod	1.85mm Male	EAR99
<a href="#">PE-W22CA001</a> 	WR-22	33 - 50	1.33:1	Round Cover UG-383/U	2.4mm Female	EAR99
<a href="#">PE-W22CA002</a> 	WR-22	33 - 50	1.33:1	Round Cover UG-383/U	2.4mm Male	EAR99
<a href="#">PEW22CA100</a> 	WR-22	33 - 50	1.4:1	Round Cover UG-383/U	2.4mm Female	EAR99
<a href="#">PE-W28CA001</a> 	WR-28	26.5 - 40	1.29:1	Square Cover UG-599/U	2.92mm Female	EAR99
<a href="#">PE-W28CA002</a> 	WR-28	26.5 - 40	1.29:1	Square Cover UG-599/U	2.92mm Male	EAR99
<a href="#">PEWCA1000</a> 	WR-28	26.5 - 40	1.3:1	Square Cover UG-599/U	2.92mm Female	EAR99
<a href="#">PEWCA1020</a> 	WR-28	26.5 - 40	1.3:1	Square Cover UG-599/U	2.92mm Female	EAR99
<a href="#">PE9826</a> 	WR-28	26.5 - 40	1.4:1	Square Cover	2.92mm Female	EAR99
<a href="#">PEWCA1001</a> 	WR-34	22 - 33	1.25:1	Square Cover UG-1530/U	2.92mm Female	EAR99

## Waveguide to Coax Adapters Continued
















PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PEWCA1021</a> 	WR-34	22 - 33	1.25:1	Square Cover UG-1530/U	2.92mm Female	EAR99
<a href="#">PE9827</a> 	WR-34	22 - 33	1.4:1	Square Cover	2.92mm Female	EAR99
<a href="#">PEWCA1026</a> 	WR-42	18 - 26.5	1.03:1	Square Cover UG-597/U	SMA Female	EAR99
<a href="#">PEWCA1019</a> 	WR-42	18 - 26.5	1.25:1	Square Cover UG-597/U	2.92mm Female	EAR99
<a href="#">PEWCA1018</a> 	WR-42	18 - 26.5	1.25:1	Square Cover UG-595/U	SMA Female	EAR99
<a href="#">PE-W42CA001</a> 	WR-42	18 - 26.5	1.29:1	Square Cover UG-597/U	2.92mm Female	EAR99
<a href="#">PE-W42CA002</a> 	WR-42	18 - 26.5	1.29:1	Square Cover UG-597/U	2.92mm Male	EAR99
<a href="#">PEWCA1070</a> 	WR-42	18 - 26.5	1.3:1	Square Cover UG-597/U	2.92mm Female	EAR99
<a href="#">PEWCA1022</a> 	WR-42	18 - 26.5	1.3:1	Square Cover UG-597/U	SMA Female	EAR99
<a href="#">PE9878</a> 	WR-42	18 - 26.5	1.4:1	Square Cover	2.92mm Female	EAR99
<a href="#">PE9813A</a> 	WR-42	18 - 26.5	1.4:1	Square Cover UG-597/U	2.92mm Male	EAR99
<a href="#">PE9812</a> 	WR-42	18 - 26.5	1.4:1	Square Type	2.92mm Female	EAR99
<a href="#">PEWCA1002</a> 	WR-51	15 - 22	1.25:1	Square Cover	SMA Female	EAR99
<a href="#">PEWCA1002A</a> 	WR-51	15 - 22	1.25:1	Square Cover	SMA Female	EAR99
<a href="#">PEWCA1027</a> 	WR-51	15 - 22	1.25:1	Square Cover	SMA Female	EAR99

## Waveguide to Coax Adapters Continued














PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PE9828</a> 	WR-51	15 - 22	1.3:1	Square Type	SMA Female	EAR99
<a href="#">PE9879</a> 	WR-51	15 - 22	1.3:1	Square Type	SMA Female	EAR99
<a href="#">PE9809</a> 	WR-62	12.4 - 18	1.2:1	Square Cover UG-1665/U	SMA Male	EAR99
<a href="#">PEWCA1028</a> 	WR-62	12.4 - 18	1.25:1	Square Cover UG-1665/U	N Female	EAR99
<a href="#">PEWCA1023</a> 	WR-62	12.4 - 18	1.25:1	Square Cover UG-1665/U	SMA Female	EAR99
<a href="#">PEWCA1003</a> 	WR-62	12.4 - 18	1.25:1	Square Cover UG-419/U	SMA Female	EAR99
<a href="#">PEWCA1072</a> 	WR-62	12.4 - 18	1.3:1	Square Cover UG-1665/U	N Female	EAR99
<a href="#">PEWCA1071</a> 	WR-62	12.4 - 18	1.3:1	Square Cover UG-1665/U	SMA Female	EAR99
<a href="#">PE9803</a> 	WR-62	12.4 - 18	1.3:1	Square Type	SMA Female	EAR99
<a href="#">PE9806</a> 	WR-62	12.4 - 18	1.4:1	Square Cover	N Male	EAR99
<a href="#">PE9866</a> 	WR-62	12.4 - 18	1.4:1	Square Type	N Female	EAR99
<a href="#">PE9875</a> 	WR-62	12.4 - 18	1.4:1	Square Type	N Female	EAR99
<a href="#">PE9846</a> 	WR-62	12.4 - 18	1.4:1	Square Type	SMA Female	EAR99
<a href="#">PEWCA1005</a> 	WR-75	10 - 15	1.25:1	Square Cover	N Female	EAR99
<a href="#">PEWCA1029</a> 	WR-75	10 - 15	1.25:1	Square Cover	N Female	EAR99







## Waveguide to Coax Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PEWCA1004</a> 	WR-75	10 - 15	1.25:1	Square Cover	SMA Female	EAR99
<a href="#">PEWCA1024</a> 	WR-75	10 - 15	1.25:1	Square Cover	SMA Female	EAR99
<a href="#">PEWCA1074</a> 	WR-75	10 - 15	1.3:1	Square Cover	N Female	EAR99
<a href="#">PEWCA1073</a> 	WR-75	10 - 15	1.3:1	Square Cover	SMA Female	EAR99
<a href="#">PE9874</a> 	WR-75	10 - 15	1.3:1	Square Type	N Female	EAR99
<a href="#">PE9819</a> 	WR-75	10 - 15	1.3:1	Square Type	SMA Female	EAR99
<a href="#">PE9867</a> 	WR-75	10 - 15	1.4:1	Square Type	N Female	EAR99
<a href="#">PE9847</a> 	WR-75	10 - 15	1.4:1	Square Type	SMA Female	EAR99
<a href="#">PE9815</a> 	WR-90	8.2 - 12.4	1.2:1	Square Cover	7mm Sexless	EAR99
<a href="#">PEWCA1033</a> 	WR-90	8.2 - 12.4	1.25:1	CMR-90	N Female	EAR99
<a href="#">PEWCA1032</a> 	WR-90	8.2 - 12.4	1.25:1	CMR-90	SMA Female	EAR99
<a href="#">PEWCA1009</a> 	WR-90	8.2 - 12.4	1.25:1	CPR-90G	N Female	EAR99
<a href="#">PEWCA1036</a> 	WR-90	8.2 - 12.4	1.25:1	CPR-90G	N Female	EAR99
<a href="#">PEWCA1035</a> 	WR-90	8.2 - 12.4	1.25:1	CPR-90G	N Male	EAR99
<a href="#">PEWCA1007</a> 	WR-90	8.2 - 12.4	1.25:1	CPR-90G	SMA Female	EAR99

## Waveguide to Coax Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PEWCA1034</a> 	WR-90	8.2 - 12.4	1.25:1	CPR-90G	SMA Female	EAR99
<a href="#">PE9868</a> 	WR-90	8.2 - 12.4	1.25:1	Square Cover UG-135/U	N Female	EAR99
<a href="#">PEWCA1031</a> 	WR-90	8.2 - 12.4	1.25:1	Square Cover UG-135/U	N Female	EAR99
<a href="#">PEWCA1008</a> 	WR-90	8.2 - 12.4	1.25:1	Square Cover UG-39/U	N Female	EAR99
<a href="#">PEWCA1025</a> 	WR-90	8.2 - 12.4	1.25:1	Square Cover UG-135/U	SMA Female	EAR99
<a href="#">PEWCA1075</a> 	WR-90	8.2 - 12.4	1.25:1	Square Cover UG-135/U	SMA Female	EAR99
<a href="#">PEWCA1030</a> 	WR-90	8.2 - 12.4	1.25:1	Square Cover UG-135/U	SMA Male	EAR99
<a href="#">PEWCA1006</a> 	WR-90	8.2 - 12.4	1.25:1	Square Cover UG-39/U	SMA Female	EAR99
<a href="#">PE9883</a> 	WR-90	8.2 - 12.4	1.25:1	UDR100	N Female	EAR99
<a href="#">PE9873</a> 	WR-90	8.2 - 12.4	1.3:1	CPR-90G	N Female	EAR99
<a href="#">PE9801</a> 	WR-90	8.2 - 12.4	1.3:1	Square Type	N Female	EAR99
<a href="#">PE9889</a> 	WR-90	8.2 - 12.4	1.3:1	Square Type	N Male	EAR99
<a href="#">PE9804</a> 	WR-90	8.2 - 12.4	1.3:1	Square Type	SMA Female	EAR99
<a href="#">PE9810</a> 	WR-90	8.2 - 12.4	1.3:1	Square Type	SMA Male	EAR99
<a href="#">PE9848</a> 	WR-90	8.2 - 12.4	1.4:1	Square Type	SMA Female	EAR99
<a href="#">PE9869</a> 	WR-102	7 - 11	1.25:1	Square Cover	N Female	EAR99
















## Waveguide to Coax Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PEWCA1038</a> 	WR-102	7 - 11	1.25:1	Square Cover UG-1493/U	N Female	EAR99
<a href="#">PEWCA1039</a> 	WR-102	7 - 11	1.25:1	Square Cover UG-1493/U	N Male	EAR99
<a href="#">PE9805</a> 	WR-102	7 - 11	1.25:1	Square Cover UG-1493/U	SMA Female	EAR99
<a href="#">PEWCA1037</a> 	WR-102	7 - 10	1.25:1	Square Cover UG-1493/U	SMA Female	EAR99
<a href="#">PE9811</a> 	WR-102	7 - 11	1.3:1	Square Cover	SMA Male	EAR99
<a href="#">PE9802</a> 	WR-102	7 - 11	1.3:1	Square Type	N Female	EAR99
<a href="#">PE9890</a> 	WR-102	7 - 11	1.3:1	Square Type	N Male	EAR99
<a href="#">PE9871</a> 	WR-102	7 - 11	1.4:1	Square Type	SMA Female	EAR99
<a href="#">PEWCA1043</a> 	WR-112	7.05 - 10	1.25:1	CMR-112	N Female	EAR99
<a href="#">PEWCA1042</a> 	WR-112	7.05 - 10	1.25:1	CMR-112	SMA Female	EAR99
<a href="#">PEWCA1013</a> 	WR-112	7.05 - 10	1.25:1	CPR-112G	N Female	EAR99
<a href="#">PEWCA1045</a> 	WR-112	7.05 - 10	1.25:1	CPR-112G	N Female	EAR99
<a href="#">PEWCA1011</a> 	WR-112	7.05 - 10	1.25:1	CPR-112G	SMA Female	EAR99
<a href="#">PEWCA1044</a> 	WR-112	7.05 - 10	1.25:1	CPR-112G	SMA Female	EAR99
<a href="#">PEWCA1041</a> 	WR-112	7.05 - 10	1.25:1	Square Cover UG-138/U	N Female	EAR99
<a href="#">PEWCA1012</a> 	WR-112	7.05 - 10	1.25:1	Square Cover UG-51/U	N Female	EAR99











## Waveguide to Coax Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PEWCA1040</a> 	WR-112	7.05 - 10	1.25:1	Square Cover UG-138/U	SMA Female	EAR99
<a href="#">PEWCA1010</a> 	WR-112	7.05 - 10	1.25:1	Square Cover UG-51/U	SMA Female	EAR99
<a href="#">PE9837</a> 	WR-112	7.05 - 10	1.3:1	CPR-112G	N Female	EAR99
<a href="#">PE9820</a> 	WR-112	7.05 - 10	1.3:1	Square Type	N Female	EAR99
<a href="#">PE9870</a> 	WR-112	7.05 - 10	1.3:1	Square Type	N Female	EAR99
<a href="#">PE9884</a> 	WR-112	7.05 - 10	1.3:1	Square Type	SMA Female	EAR99
<a href="#">PE9865</a> 	WR-112	7.05 - 10	1.4:1	Square Type	SMA Female	EAR99
<a href="#">PEWCA1049</a> 	WR-137	5.85 - 8.2	1.25:1	CMR-137	N Female	EAR99
<a href="#">PEWCA1048</a> 	WR-137	5.85 - 8.2	1.25:1	CMR-137	SMA Female	EAR99
<a href="#">PEWCA1017</a> 	WR-137	5.85 - 8.2	1.25:1	CPR-137G	N Female	EAR99
<a href="#">PEWCA1051</a> 	WR-137	5.85 - 8.2	1.25:1	CPR-137G	N Female	EAR99
<a href="#">PEWCA1015</a> 	WR-137	5.85 - 8.2	1.25:1	CPR-137G	SMA Female	EAR99
<a href="#">PEWCA1050</a> 	WR-137	5.85 - 8.2	1.25:1	CPR-137G	SMA Female	EAR99
<a href="#">PEWCA1016</a> 	WR-137	5.85 - 8.2	1.25:1	Round Cover UG-344/U	N Female	EAR99
<a href="#">PEWCA1047</a> 	WR-137	5.85 - 8.2	1.25:1	Round Cover UG-441/U	N Female	EAR99










## Waveguide to Coax Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PEWCA1014</a> 	WR-137	5.85 - 8.2	1.25:1	Round Cover UG-344/U	SMA Female	EAR99
<a href="#">PEWCA1046</a> 	WR-137	5.85 - 8.2	1.25:1	Round Cover UG-441/U	SMA Female	EAR99
<a href="#">PE9876</a> 	WR-137	5.85 - 8.2	1.3:1	CMR-137	N Female	EAR99
<a href="#">PE9830</a> 	WR-137	5.85 - 8.2	1.3:1	CMR-137	SMA Female	EAR99
<a href="#">PE9838</a> 	WR-137	5.85 - 8.2	1.3:1	CPR-137G	N Female	EAR99
<a href="#">PEWCA1053</a> 	WR-159	4.9 - 7.05	1.25:1	CMR-159	N Female	EAR99
<a href="#">PEWCA1052</a> 	WR-159	4.9 - 7.05	1.25:1	CMR-159	SMA Female	EAR99
<a href="#">PEWCA1055</a> 	WR-159	4.9 - 7.05	1.25:1	CPR-159G	N Female	EAR99
<a href="#">PEWCA1054</a> 	WR-159	4.9 - 7.05	1.25:1	CPR-159G	SMA Female	EAR99
<a href="#">PE9821</a> 	WR-159	4.9 - 7.05	1.3:1	CMR-159	N Female	EAR99
<a href="#">PE9831</a> 	WR-159	4.9 - 7.05	1.3:1	CMR-159	SMA Female	EAR99
<a href="#">PE9839</a> 	WR-159	4.9 - 7.05	1.3:1	CPR-159G	N Female	EAR99
<a href="#">PEWCA1058</a> 	WR-187	3.95 - 5.85	1.25:1	CMR-187	N Female	EAR99
<a href="#">PEWCA1057</a> 	WR-187	3.95 - 5.85	1.25:1	CMR-187	SMA Female	EAR99
<a href="#">PEWCA1059</a> 	WR-187	3.95 - 5.85	1.25:1	CPR-187G	N Female	EAR99

## Waveguide to Coax Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PEWCA1056</a> 	WR-187	3.95 - 5.85	1.25:1	Round Cover UG-407/U	N Female	EAR99
<a href="#">PE9822</a> 	WR-187	3.95 - 5.85	1.3:1	CMR-187	N Female	EAR99
<a href="#">PE9832</a> 	WR-187	3.95 - 5.85	1.3:1	CMR-187	SMA Female	EAR99
<a href="#">PE9840</a> 	WR-187	3.95 - 5.85	1.3:1	CPR-187G	N Female	EAR99
<a href="#">PEWCA1060</a> 	WR-229	3.3 - 4.9	1.25:1	CMR-229	N Female	EAR99
<a href="#">PEWCA1062</a> 	WR-229	3.3 - 4.9	1.25:1	CPR-229G	N Female	EAR99
<a href="#">PEWCA1061</a> 	WR-229	3.3 - 4.9	1.25:1	CPR-229G	SMA Female	EAR99
<a href="#">PE9823</a> 	WR-229	3.3 - 4.9	1.3:1	CMR-229	N Female	EAR99
<a href="#">PE9833</a> 	WR-229	3.3 - 4.9	1.3:1	CMR-229	SMA Female	EAR99
<a href="#">PE9877</a> 	WR-229	3.3 - 4.9	1.3:1	CPR-229G	N Female	EAR99
<a href="#">PEWCA1064</a> 	WR-284	2.6 - 3.95	1.25:1	CMR-284	N Female	EAR99
<a href="#">PE9834</a> 	WR-284	2.6 - 3.95	1.25:1	CMR-284	SMA Female	EAR99
<a href="#">PEWCA1065</a> 	WR-284	2.6 - 3.95	1.25:1	CPR-284G	N Female	EAR99
<a href="#">PEWCA1063</a> 	WR-284	2.6 - 3.95	1.25:1	Round Cover UG-584/U	N Female	EAR99
<a href="#">PE9824</a> 	WR-284	2.6 - 3.95	1.3:1	CMR-284	N Female	EAR99

## Waveguide to Coax Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Flange Type	Connector	ECCN
<a href="#">PE9842</a> 	WR-284	2.6 - 3.95	1.3:1	CPR-284G	N Female	EAR99
<a href="#">PE9882</a> 	WR-340	2.2 - 3.3	1.25:1	CPR-340F	N Female	EAR99
<a href="#">PEWCA1066</a> 	WR-340	2.2 - 3.3	1.25:1	CPR-340F	N Female	EAR99
<a href="#">PEWCA1067</a> 	WR-340	2.2 - 3.3	1.25:1	CPR-340G	N Female	EAR99
<a href="#">PEWCA1068</a> 	WR-430	1.7 - 2.6	1.25:1	CPR-430F	N Female	EAR99
<a href="#">PEWCA1069</a> 	WR-430	1.7 - 2.6	1.25:1	CPR-430G	N Female	EAR99
<a href="#">PE9872</a> 	WR-430	1.7 - 2.6	1.3:1	CPR-430F	N Female	EAR99
<a href="#">PE9835</a> 	WR-430	1.7 - 2.6	1.3:1	CPR-430F	SMA Female	EAR99
<a href="#">PE9843</a> 	WR-430	1.7 - 2.6	1.3:1	CPR-430G	N Female	EAR99





## Corner Reflectors

PE P/N	Description
<a href="#">PEWRL0000</a> 	1.4 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0001</a> 	1.8 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0002</a> 	2.4 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0003</a> 	3.2 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0004</a> 	4.3 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish

## Corner Reflectors Continued








PE P/N	Description
<a href="#">PEWRL0005</a> 	6 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0006</a> 	8 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0007</a> 	8.5 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0008</a> 	8.9 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0009</a> 	10 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0010</a> 	13 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0011</a> 	13.5 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0012</a> 	16 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish
<a href="#">PEWRL0013</a> 	24 inch Edge Length, Trihedral Corner Reflector, 1/4-20 Threaded Hole Mount, Aluminum Body, Gold Chem Film Finish

## Waveguide PIN Diode Switches

PE P/N	Waveguide Type	Switch Type	RF Frequency Range (GHz)	Insertion Loss (dB)	Maximum Isolation (dB)	Maximum Switching Time (ns)	Flange Type	Control Connector	ECCN
<a href="#">PE71S9003</a> 	WR-10	Reflective/SPST	75 - 110	5.5	20	300	Round Cover UG-387/U	SMA Female	EAR99
<a href="#">PE71S9004</a> 	WR-10	Reflective/SPDT	75 - 110	7	20	300	Round Cover UG-387/U	SMA Female	EAR99
<a href="#">PE71S9001</a> 	WR-12	Reflective/SPST	60 - 90	4.5	20	300	Round Cover UG-387/U	SMA Female	EAR99
<a href="#">PE71S9002</a> 	WR-12	Reflective/SPDT	60 - 90	6	20	300	Round Cover UG-387/U	SMA Female	EAR99





## Waveguide Magic Tees

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Flange Type	Insertion Loss (dB)	Minimum Isolation (dB)	ECCN
<a href="#">PEWMT1000</a> 	WR-10	75 - 110	Round Cover UG-387/U-Mod	1	25	EAR99
<a href="#">PEWMT1001</a> 	WR-12	60 - 90	Round Cover UG-387/U	1	25	EAR99
<a href="#">PEWMT1002</a> 	WR-15	50 - 75	Round Cover UG-385/U	1	25	EAR99
<a href="#">PEWMT1003</a> 	WR-19	40 - 60	Round Cover UG-383/U-Mod	0.8	25	EAR99
<a href="#">PEWMT1004</a> 	WR-22	33 - 50	Round Cover UG-383/U	0.7	25	EAR99
<a href="#">PEWMT1005</a> 	WR-28	26.5 - 40	Square Cover UG-599/U	0.5	25	EAR99
<a href="#">PEWMT1006</a> 	WR-42	18 - 26.5	Square Cover UG-595/U	0.5	25	EAR99



## Waveguide Phase Shifters

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Phase Range (Degrees)	Input Power (Watts)	Insertion Loss (dB)	Length (in)	Flange Type	ECCN
<a href="#">PE-W10PS1001</a> 	WR-10	75 - 110	0 - 180	0.6	1	3	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W12PS1001</a> 	WR-12	60 - 90	0 - 180	0.7	1	3	Round Cover UG-387/U	EAR99
<a href="#">PE-W15PS1001</a> 	WR-15	50 - 75	0 - 180	0.8	1	3	Round Cover UG-385/U	EAR99
<a href="#">PE-W19PS1001</a> 	WR-19	40 - 60	0 - 180	1	1	3	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE-W22PS1001</a> 	WR-22	33 - 50	0 - 180	1	1	4	Round Cover UG-383/U	EAR99
<a href="#">PE-W28PS1001</a> 	WR-28	26.5 - 40	0 - 180	1	1	4	Square Cover UG-599/U	EAR99







## Waveguide Phase Shifters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Phase Range (Degrees)	Input Power (Watts)	Insertion Loss (dB)	Length (in)	Flange Type	ECCN
<a href="#">PE-W28PS1002</a> 	WR-28	26.5 - 40	0 - 180	1		4	Square Cover UG-599/U	EAR99
<a href="#">PE-W42PS1001</a> 	WR-42	18 - 26.5	0 - 180	1.5	1	4	Square Cover UG-595/U	EAR99
















## Waveguide Gunn Oscillators

PE P/N	Waveguide Type	Center Frequency (GHz)	Tuning Range (GHz)	Frequency Stability (MHz/deg C)	Phase Noise (dBc/Hz)	Output Power (dBm)	Flange Type	ECCN
<a href="#">PEWGN1000</a> 	WR-28	35	3	-0.4	-95	10	Square Cover UG-599/U	EAR99
<a href="#">PEWGN1001</a> 	WR-42	24.125	1,000 MHz	-0.2	-98	10	Square Cover UG-595/U	EAR99
















## Waveguide Sections

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (GHz)	Typical VSWR	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PEW05S000-1</a> 	WR-5	140 - 220		1.15:1		1	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW05S000-3</a> 	WR-5	140 - 220		1.15:1		3	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW05S000-6</a> 	WR-5	140 - 220		1.15:1		6	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW05S000-9</a> 	WR-5	140 - 220		1.15:1		9	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW05S000-12</a> 	WR-5	140 - 220		1.15:1		12	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW06S000-1</a> 	WR-6	110 - 170		1.15:1		1	Round Cover UG-387/U-Mod	EAR99
















## Waveguide Sections Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (GHz)	Typical VSWR	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PEW06S000-3</a> 	WR-6	110 - 170		1.15:1		3	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW06S000-6</a> 	WR-6	110 - 170		1.15:1		6	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW06S000-9</a> 	WR-6	110 - 170		1.15:1		9	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW06S000-12</a> 	WR-6	110 - 170		1.15:1		12	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW08S000-1</a> 	WR-8	90 - 140		1.15:1		1	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW08S000-3</a> 	WR-8	90 - 140		1.15:1		3	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW08S000-6</a> 	WR-8	90 - 140		1.15:1		6	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW08S000-9</a> 	WR-8	90 - 140		1.15:1		9	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW08S000-12</a> 	WR-8	90 - 140		1.15:1		12	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W10S001-3</a> 	WR-10	75 - 110			1.06:1	3	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW10S010-3</a> 	WR-10	75 - 110		1.06:1		3	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W10S001-6</a> 	WR-10	75 - 110			1.06:1	6	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW10S010-6</a> 	WR-10	75 - 110		1.06:1		6	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W12S001-3</a> 	WR-12	60 - 90	0.25		1.06:1	3	Round Cover UG-387/U	EAR99
<a href="#">PE-W12S001-6</a> 	WR-12	60 - 90	0.44		1.06:1	6	Round Cover UG-387/U	EAR99




## Waveguide Sections Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (GHz)	Typical VSWR	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W12S001-9</a> 	WR-12	60 - 90	0.64		1.06:1	9	Round Cover UG-387/U	EAR99
<a href="#">PE-W12S001-12</a> 	WR-12	60 - 90	0.82		1.06:1	12	Round Cover UG-387/U	EAR99
<a href="#">PEW12S010-3</a> 	WR-12	60 - 90		1.06:1	1.15:1	3	Round Cover UG-387/U	EAR99
<a href="#">PEW12S010-6</a> 	WR-12	60 - 90		1.06:1		6	Round Cover UG-387/U	EAR99
<a href="#">PEW12S010-9</a> 	WR-12	60 - 90		1.06:1		9	Round Cover UG-387/U	EAR99
<a href="#">PE-W15S001-3</a> 	WR-15	50 - 75	0.2		1.06:1	3	Round Cover UG-385/U	EAR99
<a href="#">PE-W15S001-6</a> 	WR-15	50 - 75	0.34		1.06:1	6	Round Cover UG-385/U	EAR99
<a href="#">PE-W15S001-9</a> 	WR-15	50 - 75	0.49		1.06:1	9	Round Cover UG-385/U	EAR99
<a href="#">PE-W15S001-12</a> 	WR-15	50 - 75	0.64		1.06:1	12	Round Cover UG-385/U	EAR99
<a href="#">PEW15S010-12</a> 	WR-15	50 - 75		1.06:1		12	Round Cover UG-385/U	EAR99
<a href="#">PE-W19S001-3</a> 	WR-19	40 - 60	0.15		1.06:1	3	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE-W19S001-6</a> 	WR-19	40 - 60	0.25		1.06:1	6	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE-W19S001-9</a> 	WR-19	40 - 60	0.34		1.06:1	9	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE-W19S001-12</a> 	WR-19	40 - 60	0.44		1.06:1	12	Round Cover UG-383/U-Mod	EAR99
<a href="#">PEW19S010-3</a> 	WR-19	40 - 60		1.06:1		3	Round Cover UG-383/U-Mod	EAR99

## Waveguide Sections Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (GHz)	Typical VSWR	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PEW19S010-12</a> 	WR-19	40 - 60		1.06:1		12	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE-W22S001-3</a> 	WR-22	33 - 50	0.13		1.06:1	3	Round Cover UG-383/U	EAR99
<a href="#">PE-W22S001-6</a> 	WR-22	33 - 50	0.21		1.06:1	6	Round Cover UG-383/U	EAR99
<a href="#">PE-W22S001-9</a> 	WR-22	33 - 50	0.29		1.06:1	9	Round Cover UG-383/U	EAR99
<a href="#">PE-W22S001-12</a> 	WR-22	33 - 50	0.36		1.06:1	12	Round Cover UG-383/U	EAR99
<a href="#">PEW22S010-3</a> 	WR-22	33 - 50			1.1:1	3	Round Cover UG-383/U	EAR99
<a href="#">PEWSP1000</a> 	WR-22	33 - 50		1.09:1		4	Round Cover UG-383/U	EAR99
<a href="#">PE-W28S001-3</a> 	WR-28	26.5 - 40	0.11		1.06:1	3	Square Cover UG-599/U	EAR99
<a href="#">PE-W28S001-6</a> 	WR-28	26.5 - 40	0.17		1.06:1	6	Square Cover UG-599/U	EAR99
<a href="#">PE-W28S001-9</a> 	WR-28	26.5 - 40	0.22		1.06:1	9	Square Cover UG-599/U	EAR99
<a href="#">PE-W28S001-12</a> 	WR-28	26.5 - 40	0.28		1.06:1	12	Square Cover UG-599/U	EAR99
<a href="#">PEW28S010-3</a> 	WR-28	26.5 - 40			1.06:1	3	Square Cover UG-599/U	EAR99
<a href="#">PEWSP1001</a> 	WR-28	26.5 - 40		1.09:1		4	Square Cover UG-599/U	EAR99
<a href="#">PEW28S010-6</a> 	WR-28	26.5 - 40			1.06:1	6	Square Cover UG-599/U	EAR99
<a href="#">PEWSP1002</a> 	WR-34	20 - 33		1.07:1		4	Square Cover UG-1530/U	EAR99

## Waveguide Sections Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (GHz)	Typical VSWR	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W42S002-3</a> 	WR-42	18 - 26.5	0.08		1.06:1	3	Square Cover UG-595/U	EAR99
<a href="#">PE-W42S001A-6</a> 	WR-42	18 - 26.5	0.12		1.06:1	6	Square Cover UG-595/U	EAR99
<a href="#">PE-W42S001A-9</a> 	WR-42	18 - 26.5	0.15		1.06:1	9	Square Cover UG-595/U	EAR99
<a href="#">PEWSP1003</a> 	WR-42	18 - 26.5		1.07:1		4	Square Cover UG-595/U	EAR99
<a href="#">PE-W42S001-12</a> 	WR-42	18 - 26.5			1.06:1	12	Square Cover UG-595/U	EAR99
<a href="#">PE-W51S001-3</a> 	WR-51	15 - 22	0.07		1.06:1	3	UBR180 None	EAR99
<a href="#">PE-W51S001-6</a> 	WR-51	15 - 22	0.09		1.06:1	6	UBR180 None	EAR99
<a href="#">PE-W51S001-9</a> 	WR-51	15 - 22	0.11		1.06:1	9	UBR180 None	EAR99
<a href="#">PE-W51S001-12</a> 	WR-51	15 - 22	0.13		1.06:1	12	UBR180 None	EAR99
<a href="#">PEWSP1004</a> 	WR-51	15 - 22		1.07:1		4	Square Cover None	EAR99
<a href="#">PE-W62S002-6</a> 	WR-62	12.4 - 18	0.08		1.06:1	6	Square Cover UG-419/U	EAR99
<a href="#">PE-W62S002-9</a> 	WR-62	12.4 - 18	0.1		1.06:1	9	Square Cover UG-419/U	EAR99
<a href="#">PE-W62S002-12</a> 	WR-62	12.4 - 18	0.11		1.06:1	12	Square Cover UG-419/U	EAR99
<a href="#">PE-W62S001-3</a> 	WR-62	12.4 - 18		1.03:1		3	Square Cover UG-419/U	EAR99
<a href="#">PEWSP1005</a> 	WR-62	12.4 - 18		1.07:1		4	Square Cover UG-419/U	EAR99
<a href="#">PE-W62S001-6</a> 	WR-62	12.4 - 18		1.03:1		6	Square Cover UG-419/U	EAR99

## Waveguide Sections Continued





PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (GHz)	Typical VSWR	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W62S001-9</a> 	WR-62	12.4 - 18		1.03:1		9	Square Cover UG-419/U	EAR99
<a href="#">PE-W62S001-12</a> 	WR-62	12.4 - 18		1.03:1		12	Square Cover UG-419/U	EAR99
<a href="#">PE-W75S001A-6</a> 	WR-75	10 - 15	0.1		1.03:1	6	UBR120 None	EAR99
<a href="#">PE-W75S001-3</a> 	WR-75	10 - 15		1.03:1		3	UBR120 None	EAR99
<a href="#">PEWSP1006</a> 	WR-75	10 - 15		1.07:1		4	Square Cover None	EAR99
<a href="#">PE-W75S001-6</a> 	WR-75	10 - 15		1.03:1		6	UBR120 None	EAR99
<a href="#">PE-W75S001-9</a> 	WR-75	10 - 15		1.03:1		9	UBR120 None	EAR99
<a href="#">PE-W75S001-12</a> 	WR-75	10 - 15		1.03:1		12	UBR120 None	EAR99
<a href="#">PE-W90S001A-9</a> 	WR-90	8.2 - 12.4	0.1		1.03:1	9	Square Cover UG-39/U	EAR99
<a href="#">PE-W90S001-3</a> 	WR-90	8.2 - 12.4		1.03:1		3	Square Cover UG-39/U	EAR99
<a href="#">PE-W90S002-3</a> 	WR-90	8.2 - 12.4		1.03:1		3	CPR-90G None	EAR99
<a href="#">PEWSP1007</a> 	WR-90	8.2 - 12.4		1.07:1		4	Square Cover UG-39/U	EAR99
<a href="#">PEWSP1008</a> 	WR-90	8.2 - 12.4		1.07:1		4	CPR-90G None	EAR99
<a href="#">PE-W90S001-6</a> 	WR-90	8.2 - 12.4		1.03:1		6	Square Cover UG-39/U	EAR99
<a href="#">PE-W90S002-6</a> 	WR-90	8.2 - 12.4		1.03:1		6	CPR-90G None	EAR99
<a href="#">PE-W90S001-9</a> 	WR-90	8.2 - 12.4		1.03:1		9	Square Cover UG-39/U	EAR99

## Waveguide Sections Continued











PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (GHz)	Typical VSWR	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W90S002-9</a> 	WR-90	8.2 - 12.4		1.03:1		9	CPR-90G None	EAR99
<a href="#">PE-W90S001-12</a> 	WR-90	8.2 - 12.4		1.03:1		12	Square Cover UG-39/U	EAR99
<a href="#">PE-W90S002-12</a> 	WR-90	8.2 - 12.4		1.03:1		12	CPR-90G None	EAR99
<a href="#">PE-W112S001-3</a> 	WR-112	7.05 - 10		1.03:1		3	Square Cover UG-51/U	EAR99
<a href="#">PEWSP1009</a> 	WR-112	7.05 - 10		1.07:1		4	Square Cover UG-51/U	EAR99
<a href="#">PEWSP1010</a> 	WR-112	7.05 - 10		1.07:1		4	CPR-112G None	EAR99
<a href="#">PE-W112S001-6</a> 	WR-112	7.05 - 10		1.03:1		6	Square Cover UG-51/U	EAR99
<a href="#">PE-W112S001-9</a> 	WR-112	7.05 - 10		1.03:1		9	Square Cover UG-51/U	EAR99
<a href="#">PE-W112S001-12</a> 	WR-112	7.05 - 10		1.03:1		12	Square Cover UG-51/U	EAR99
<a href="#">PE-W137S001-3</a> 	WR-137	5.85 - 8.2		1.03:1		3	Round Cover UG-344/U	EAR99
<a href="#">PE-W137S002-3</a> 	WR-137	5.85 - 8.2		1.03:1		3	CPR-137G None	EAR99
<a href="#">PEWSP1011</a> 	WR-137	5.85 - 8.2		1.07:1		4	Round Cover UG-344/U	EAR99
<a href="#">PEWSP1012</a> 	WR-137	5.85 - 8.2		1.07:1		4	CPR-137G None	EAR99
<a href="#">PE-W137S001-6</a> 	WR-137	5.85 - 8.2		1.03:1		6	Round Cover UG-344/U	EAR99
<a href="#">PE-W137S002-6</a> 	WR-137	5.85 - 8.2		1.03:1		6	CPR-137G None	EAR99












## Waveguide Sections Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Insertion Loss (GHz)	Typical VSWR	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE-W137S001-9</a> 	WR-137	5.85 - 8.2		1.03:1		9	Round Cover UG-344/U	EAR99
<a href="#">PE-W137S002-9</a> 	WR-137	5.85 - 8.2		1.03:1		9	CPR-137G None	EAR99
<a href="#">PE-W137S001-12</a> 	WR-137	5.85 - 8.2		1.03:1		12	Round Cover UG-344/U	EAR99
<a href="#">PE-W137S002-12</a> 	WR-137	5.85 - 8.2		1.03:1		12	CPR-137G None	EAR99













## Waveguide Terminations

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Input Power (Watts)	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PEW10TR0001</a> 	WR-10	75 - 110	0.4	1.06:1	2	Round Cover UG-387/U	EAR99
<a href="#">PE-W10TR1001</a> 	WR-10	75 - 110	0.4	1.25:1	2	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W12TR1001</a> 	WR-12	60 - 90	0.6	1.2:1	2	Round Cover UG-387/U	EAR99
<a href="#">PEW15TR0001</a> 	WR-15	50 - 75	1	1.2:1	2	Round Cover UG-385/U	EAR99
<a href="#">PE-W15TR1001</a> 	WR-15	50 - 75	1	1.2:1	2	Round Cover UG-385/U	EAR99
<a href="#">PEW19TR0001</a> 	WR-19	40 - 60	2	1.06:1	2	Round Cover UG-383/U	EAR99
<a href="#">PE-W19TR1001</a> 	WR-19	40 - 60	2	1.09:1	2	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE-W22TR1002</a> 	WR-22	33 - 50	4	1.05:1	2	Round Cover UG-383/U	EAR99
<a href="#">PE-W22TR1001</a> 	WR-22	33 - 50	4	1.07:1	2	Round Cover UG-383/U	EAR99
<a href="#">PEWTR1000</a> 	WR-28	26.5 - 40	0.5	1.02:1		Square Cover UG-599/U	EAR99
















## Waveguide Terminations Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Input Power (Watts)	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE6809</a> 	WR-28	26.5 - 40	0.5	1.05:1	2	Square Cover	EAR99
<a href="#">PE6800</a> 	WR-28	26.5 - 40	0.5	1.3:1	1	Square Cover UG-599/U	EAR99
<a href="#">PE-W28TR1001</a> 	WR-28	26.5 - 40	5	1.07:1	2	Square Cover UG-599/U	EAR99
<a href="#">PE6818</a> 	WR-28	26.5 - 40	40	1.07:1	3	Square Cover	EAR99
<a href="#">PE6200</a> 	WR-28	26.5 - 40	75	1.2:1	4	Square Cover	EAR99
<a href="#">PE6810</a> 	WR-34	22 - 33	0.5	1.05:1	3	Square Cover	EAR99
<a href="#">PE6801</a> 	WR-34	22 - 33	0.5	1.25:1	1	Square Cover	EAR99
<a href="#">PEWTR1001</a> 	WR-34	22 - 33	1	1.25:1		Square Cover UG-1530/U	EAR99
<a href="#">PE6819</a> 	WR-34	22 - 33	45	1.1:1	4	Square Cover	EAR99
<a href="#">PE6828</a> 	WR-34	22 - 33	75	1.1:1	4	Square Cover	EAR99
<a href="#">PE6811</a> 	WR-42	18 - 26.5	0.5	1.05:1	3	Square Cover	EAR99
<a href="#">PE6802</a> 	WR-42	18 - 26.5	0.5	1.25:1	1	Square Cover UG-597/U	EAR99
<a href="#">PEWTR1002</a> 	WR-42	18 - 26.5	1	1.02:1		Square Cover UG-595/U	EAR99
<a href="#">PE-W42TR1001</a> 	WR-42	18 - 26.5	6	1.08:1	3	Square Cover UG-595/U	EAR99
<a href="#">PE6820</a> 	WR-42	18 - 26.5	50	1.07:1	4	Square Cover	EAR99
<a href="#">PE6829</a> 	WR-42	18 - 26.5	100	1.1:1	4	Square Cover	EAR99

## Waveguide Terminations Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Input Power (Watts)	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE6803</a> 	WR-51	15 - 18	1	1.2:1	1	Square Cover	EAR99
<a href="#">PE6821</a> 	WR-51	15 - 18	55	1.07:1	4	Square Cover	EAR99
<a href="#">PEWTR1003</a> 	WR-51	15 - 22	1	1.02:1		Square Cover	EAR99
<a href="#">PE6812</a> 	WR-51	15 - 22	1	1.05:1	3	Square Cover	EAR99
<a href="#">PE6830</a> 	WR-51	15 - 22	100	1.1:1	4	Square Cover	EAR99
<a href="#">PEWTR1004</a> 	WR-62	12.4 - 18	1.5	1.02:1		Square Cover UG-419/U	EAR99
<a href="#">PE6201</a> 	WR-62	12.4 - 18	1.5	1.05:1	4	Square Cover	EAR99
<a href="#">PE6804</a> 	WR-62	12.4 - 18	2	1.2:1	1	Square Cover	EAR99
<a href="#">PE6836</a> 	WR-62	12.4 - 18	60	1.07:1	4	Square Cover	EAR99
<a href="#">PE6831</a> 	WR-62	12.4 - 18	175	1.1:1	4	Square Cover	EAR99
<a href="#">PE6814</a> 	WR-75	10 - 15	2	1.05:1	4	Square Cover	EAR99
<a href="#">PE6805</a> 	WR-75	10 - 15	2	1.2:1	1	Square Cover	EAR99
<a href="#">PEWTR1005</a> 	WR-75	10 - 15	2.5	1.02:1		Square Cover	EAR99
<a href="#">PE6823</a> 	WR-75	10 - 15	75	1.07:1	5	Square Cover	EAR99
<a href="#">PE6832</a> 	WR-75	10 - 15	175	1.1:1	6	Square Cover	EAR99
<a href="#">PE6815</a> 	WR-90	8.2 - 12.4	2	1.05:1	4	Square Cover	EAR99


## Waveguide Terminations Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Input Power (Watts)	Maximum VSWR	Length (in)	Flange Type	ECCN
<a href="#">PE6806</a> 	WR-90	8.2 - 12.4	2	1.2:1	1	Square Cover UG-135/U	EAR99
<a href="#">PEWTR1006</a> 	WR-90	8.2 - 12.4	4	1.02:1		Square Cover UG-39/U	EAR99
<a href="#">PEWTR1007</a> 	WR-90	8.2 - 12.4	4	1.02:1		CPR-90G	EAR99
<a href="#">PE6824</a> 	WR-90	8.2 - 12.4	90	1.07:1	6	Square Cover	EAR99
<a href="#">PE6833</a> 	WR-90	8.2 - 12.4	200	1.1:1	6	Square Cover	EAR99
<a href="#">PE6816</a> 	WR-102	7 - 11	2	1.05:1	4	Square Cover	EAR99
<a href="#">PE6807</a> 	WR-102	7 - 11	2	1.2:1	1	Square Cover	EAR99
<a href="#">PE6834</a> 	WR-102	7 - 11	300	1.1:1	7	Square Cover	EAR99
<a href="#">PE6808</a> 	WR-112	7.05 - 10	2	1.2:1	1	Square Cover	EAR99
<a href="#">PEWTR1008</a> 	WR-112	7.05 - 10	5	1.02:1		Square Cover UG-51/U	EAR99
<a href="#">PEWTR1009</a> 	WR-112	7.05 - 10	5	1.02:1		CPR-112G	EAR99
<a href="#">PE6826</a> 	WR-112	7.05 - 10	100	1.1:1	7	Square Cover	EAR99
<a href="#">PE6835</a> 	WR-112	7.05 - 10	300	1.1:1	7	Square Cover	EAR99
<a href="#">PEWTR1010</a> 	WR-137	5.85 - 8.2	6	1.02:1		Round Cover UG-344/U	EAR99
<a href="#">PEWTR1011</a> 	WR-137	5.85 - 8.2	6	1.02:1		CPR-137G	EAR99







## Waveguide Transitions

PE P/N	Waveguide 1 Type	Flange 1 Type	Waveguide 2 Type	Flange 2 Type	VSWR	ECCN
<a href="#">PE-W10TS12001A</a> 	WR-10	Round Cover UG-387/U-Mod	WR-12	Round Cover UG-387/U	1.6:1	EAR99
<a href="#">PE-W10TS15001</a> 	WR-10	Round Cover UG-387/U-Mod	WR-15	Round Cover UG-385/U	1.45:1	EAR99
<a href="#">PE-W10TS19001</a> 	WR-10	Round Cover UG-387/U-Mod	WR-19	Round Cover UG-383/U-Mod	1.4:1	EAR99
<a href="#">PE-W12TS15001</a> 	WR-12	Round Cover UG-387/U	WR-15	Round Cover UG-385/U	1.2:1	EAR99
<a href="#">PE-W15TS19001</a> 	WR-15	Round Cover UG-385/U	WR-19	Round Cover UG-383/U-Mod	1.1:1	EAR99
<a href="#">PE-W15TS22001</a> 	WR-15	Round Cover UG-385/U	WR-22	Round Cover UG-383/U	1.15:1	EAR99
<a href="#">PE-W19TS22001</a> 	WR-19	Round Cover UG-383/U-Mod	WR-22	Round Cover UG-383/U	1.5:1	EAR99
<a href="#">PE-W19TS28001</a> 	WR-19	Round Cover UG-383/U-Mod	WR-28	Square Cover UG-599/U	1.35:1	EAR99
<a href="#">PE-W22TS28001</a> 	WR-22	Round Cover UG-383/U	WR-28	Square Cover UG-599/U	1.35:1	EAR99
<a href="#">PE-W22TS42001</a> 	WR-22	Round Cover UG-383/U	WR-42	Square Cover UG-595/U	1.35:1	EAR99
<a href="#">PE-W28TS42001</a> 	WR-28	Square Cover UG-599/U	WR-42	Square Cover UG-595/U	1.2:1	EAR99
<a href="#">PE-W28TS51001</a> 	WR-28	Square Cover UG-599/U	WR-51	UBR-180/U-Mod	1.38:1	EAR99
<a href="#">PEWTS1010</a> 	WR-34	Square Cover UG-1530/U	WR-28	Square Cover UG-599/U	1.08:1	EAR99
<a href="#">PEWTS1009</a> 	WR-42	Square Cover UG-595/U	WR-34	Square Cover UG-1530/U	1.08:1	EAR99
<a href="#">PEWTS1008</a> 	WR-51	Square Cover	WR-42	Square Cover UG-595/U	1.08:1	EAR99

















## Waveguide Transitions Continued

PE P/N	Waveguide 1 Type	Flange 1 Type	Waveguide 2 Type	Flange 2 Type	VSWR	ECCN
<a href="#">PEWTS1007A</a> 	WR-62	Square Cover UG-1665/U	WR-51	Square Cover	1.08:1	EAR99
<a href="#">PEWTS1006</a> 	WR-75	Square Cover	WR-62	Square Cover UG-1665/U	1.08:1	EAR99
<a href="#">PEWTS1004</a> 	WR-90	Square Cover UG-39/U	WR-75	Square Cover	1.08:1	EAR99
<a href="#">PEWTS1005</a> 	WR-90	CPR-90G	WR-75	Square Cover	1.08:1	EAR99
<a href="#">PEWTS1002</a> 	WR-112	Square Cover UG-51/U	WR-90	Square Cover UG-39/U	1.08:1	EAR99
<a href="#">PEWTS1003</a> 	WR-112	CPR-112G	WR-90	CPR-90G	1.08:1	EAR99
<a href="#">PEWTS1000</a> 	WR-137	Round Cover UG-344/U	WR-112	Square Cover UG-51/U	1.08:1	EAR99
<a href="#">PEWTS1001</a> 	WR-137	CPR-137G	WR-112	CPR-112G	1.08:1	EAR99











## Waveguide Twists

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Waveguide Offset Angle (Degrees)	Length (in)	Flange Type	ECCN
<a href="#">PE-W10TW1002</a> 	WR-10	75 - 110	1.1:1	45 Left-hand	1	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W10TW1003</a> 	WR-10	75 - 110	1.1:1	45 Right-hand	1	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W10TW1001</a> 	WR-10	75 - 110	1.43:1	90	1	Round Cover UG-387/U-Mod	EAR99
<a href="#">PE-W12TW1002</a> 	WR-12	60 - 90	1.16:1	45 Left-hand	1	Round Cover UG-387/U	EAR99
<a href="#">PE-W12TW1003</a> 	WR-12	60 - 90	1.16:1	45 Right-hand	1	Round Cover UG-387/U	EAR99
<a href="#">PEW12TW001</a> 	WR-12	60 - 90		90 Right-hand	1	Round Cover UG-387/U-Mod	EAR99





## Waveguide Twists Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Waveguide Offset Angle (Degrees)	Length (in)	Flange Type	ECCN
<a href="#">PE-W12TW1001</a> 	WR-12	60 - 90	1.12:1	90	1	Round Cover UG-387/U	EAR99
<a href="#">PE-W15TW1002</a> 	WR-15	50 - 75	1.11:1	45 Left-hand	2	Round Cover UG-385/U	EAR99
<a href="#">PE-W15TW1003</a> 	WR-15	50 - 75	1.11:1	45 Right-hand	2	Round Cover UG-385/U	EAR99
<a href="#">PE-W15TW1001</a> 	WR-15	50 - 75	1.11:1	90	2	Round Cover UG-385/U	EAR99
<a href="#">PE-W19TW1002</a> 	WR-19	40 - 60	1.25:1	45 Left-hand	2	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE-W19TW1003</a> 	WR-19	40 - 60	1.25:1	45 Right-hand	2	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE-W19TW1001</a> 	WR-19	40 - 60	1.22:1	90	2	Round Cover UG-383/U-Mod	EAR99
<a href="#">PE-W22TW1002</a> 	WR-22	33 - 50	1.02:1	45 Left-hand	2	Round Cover UG-383/U	EAR99
<a href="#">PE-W22TW1003</a> 	WR-22	33 - 50	1.02:1	45 Right-hand	2	Round Cover UG-383/U	EAR99
<a href="#">PEW22TW001</a> 	WR-22	33 - 50	1.15:1	90	2	Round Cover UG-383/U	EAR99
<a href="#">PE-W22TW1001</a> 	WR-22	33 - 50	1.02:1	90	2	Round Cover UG-383/U	EAR99
<a href="#">PEW28TW001</a> 	WR-28	26.5 - 40	1.1:1	45 Right-hand	2	Square Cover UG-595/U	EAR99
<a href="#">PE-W28TW1002</a> 	WR-28	26.5 - 40	1.09:1	45 Left-hand	2	Square Cover UG-599/U	EAR99
<a href="#">PE-W28TW1003</a> 	WR-28	26.5 - 40	1.09:1	45 Right-hand	2	Square Cover UG-599/U	EAR99
<a href="#">PE-W28TW1001</a> 	WR-28	26.5 - 40	1.07:1	90	2	Square Cover UG-599/U	EAR99
<a href="#">PE-W42TW1002</a> 	WR-42	18 - 26.5	1.25:1	45 Left-hand	3	Square Cover UG-595/U	EAR99

## Waveguide Twists Continued

















PE P/N	Waveguide Type	RF Frequency Range (GHz)	Maximum VSWR	Waveguide Offset Angle (Degrees)	Length (in)	Flange Type	ECCN
<a href="#">PE-W42TW1003</a> 	WR-42	18 - 26.5	1.25:1	45 Right-hand	3	Square Cover UG-595/U	EAR99
<a href="#">PE-W42TW1001</a> 	WR-42	18 - 26.5	1.07:1	90	3	Square Cover UG-595/U	EAR99
<a href="#">PEW8TW0001</a> 	WR-8	90 - 140		45 Left-hand	1	Square Cover UG-387/U-Mod	EAR99
<a href="#">PEW8TW0002</a> 	WR-8	90 - 140		90 Right-hand	1	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW6TW0000</a> 	WR-6	110 - 170		45 Right-hand	1	Square Cover UG-387/U-Mod	EAR99
<a href="#">PEW6TW0001</a> 	WR-6	110 - 170		45 Left-hand	1	Square Cover UG-387/U-Mod	EAR99
<a href="#">PEW6TW0002</a> 	WR-6	110 - 170		90 Right-hand	1	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEW5TW0000</a> 	WR-5	140 - 220		45 Right-hand	1	Square Cover UG-387/U-Mod	EAR99
<a href="#">PEW5TW0001</a> 	WR-5	140 - 220		45 Left-hand	1	Square Cover UG-387/U-Mod	EAR99
<a href="#">PEW5TW0002</a> 	WR-5	140 - 220		90 Right-hand	1	Round Cover UG-387/U-Mod	EAR99

## Waveguide Bulkhead Adapters
















PE P/N	Waveguide Type	RF Frequency Range (GHz)	Flange 1	Flange 2	ECCN
<a href="#">PEWAD5000</a> 	WR-10	75 - 110	Round Cover UG-387/U-Mod	Round Cover UG-387/U-Mod	EAR99
<a href="#">PEWAD5001</a> 	WR-12	60 - 90	Round Cover UG-387/U	Round Cover UG-387/U	EAR99
<a href="#">PEWAD5002</a> 	WR-15	50 - 75	Round Cover UG-385/U	Round Cover UG-385/U	EAR99
<a href="#">PEWAD5003</a> 	WR-19	40 - 60	Round Cover UG-383/U-Mod	Round Cover UG-383/U-Mod	EAR99


















## Waveguide Bulkhead Adapters Continued

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Flange 1	Flange 2	ECCN
<a href="#">PEWAD5007</a> 	WR-22	33 - 50	Round Cover UG-383/U	Round Cover UG-383/U	EAR99
<a href="#">PEWAD5004</a> 	WR-22	33 - 50	Round Cover UG-383/U	Round Cover UG-383/U	EAR99
<a href="#">PEWAD5008</a> 	WR-28	26.5 - 40	Square Cover UG-599/U	Square Cover UG-599/U	EAR99
<a href="#">PEWAD5005</a> 	WR-28	26.5 - 40	Square Cover UG-599/U	Square Cover UG-599/U	EAR99
<a href="#">PEWAD5009</a> 	WR-34	22 - 33	Square Cover UG-1530/U	Square Cover UG-1530/U	EAR99
<a href="#">PEWAD5010</a> 	WR-42	18 - 26.5	Square Cover UG-595/U	Square Cover UG-595/U	EAR99
<a href="#">PEWAD5006</a> 	WR-42	18 - 26.5	Square Cover UG-595/U	Square Cover UG-595/U	EAR99
<a href="#">PEWAD5011</a> 	WR-51	15 - 22	Square Cover	Square Cover	EAR99
<a href="#">PEWAD5012</a> 	WR-62	12.4 - 18	Square Cover UG-1665/U	Square Cover UG-1665/U	EAR99
<a href="#">PEWAD5013</a> 	WR-75	10 - 15	Square Cover	Square Cover	EAR99
<a href="#">PEWAD5014</a> 	WR-90	8.2 - 12.4	Square Cover UG-39/U	Square Cover UG-39/U	EAR99
<a href="#">PEWAD5015</a> 	WR-90	8.2 - 12.4	CPR-90G	CPR-90G	EAR99
<a href="#">PEWAD5016</a> 	WR-112	7.05 - 10	Square Cover UG-51/U	Square Cover UG-51/U	EAR99
<a href="#">PEWAD5017</a> 	WR-112	7.05 - 10	CPR-112G	CPR-112G	EAR99
<a href="#">PEWAD5018</a> 	WR-137	5.85 - 8.2	Square Cover UG-344/U	Square Cover UG-344/U	EAR99
<a href="#">PEWAD5019</a> 	WR-137	5.85 - 8.2	CPR-137G	CPR-137G	EAR99















## Waveguide Electromechanical Relay Switches

PE P/N	Waveguide Type	Switch Type	RF Freq. Range (GHz)	Actuator/Features	Insertion Loss (dB)	Isolation (dB)	DC Power (Volts)	Power Rating (Watts)	ROHS Compliant	ECCN
<a href="#">PEWGS6002</a> 	WR-28	SPDT	26.5 - 40	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.15	55	12	550	Yes	EAR99
<a href="#">PEWGS6000</a> 	WR-28	SPDT	26.5 - 40	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.15	55	28	550	Yes	EAR99
<a href="#">PEWGS6003</a> 	WR-28	SPDT	26.5 - 40	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.15	55	12	550	Yes	EAR99
<a href="#">PEWGS6001</a> 	WR-28	SPDT	26.5 - 40	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.15	55	28	550	Yes	EAR99
<a href="#">PEWGS6042</a> 	WR-34	SPDT/DPDT	22 - 33	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.15	60	12	620	Yes	EAR99
<a href="#">PEWGS6040</a> 	WR-34	SPDT/DPDT	22 - 33	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.15	60	28	620	Yes	EAR99
<a href="#">PEWGS6043</a> 	WR-34	SPDT/DPDT	22 - 33	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.15	60	12	620	Yes	EAR99
<a href="#">PEWGS6041</a> 	WR-34	SPDT/DPDT	22 - 33	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.15	60	28	620	Yes	EAR99
<a href="#">PEWGS6006</a> 	WR-42	SPDT	18 - 26.5	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.15	60	12	800	Yes	EAR99
<a href="#">PEWGS6004</a> 	WR-42	SPDT	18 - 26.5	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.15	60	28	800	Yes	EAR99
<a href="#">PEWGS6007</a> 	WR-42	SPDT	18 - 26.5	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.15	60	12	800		EAR99
<a href="#">PEWGS6005</a> 	WR-42	SPDT	18 - 26.5	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.15	60	28	800		EAR99
<a href="#">PEWGS6010</a> 	WR-62	SPDT	12.4 - 18	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.1	60	12	2,000	Yes	EAR99
<a href="#">PEWGS6008</a> 	WR-62	SPDT	12.4 - 18	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.1	60	28	2,000	Yes	EAR99
<a href="#">PEWGS6011</a> 	WR-62	SPDT	12.4 - 18	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.1	60	12	2,000	Yes	EAR99

## Waveguide Electromechanical Relay Switches Continued

PE P/N	Waveguide Type	Switch Type	RF Freq. Range (GHz)	Actuator/Features	Insertion Loss (dB)	Isolation (dB)	DC Power (Volts)	Power Rating (Watts)	ROHS Compliant	ECCN
<a href="#">PEWGS6009</a> 	WR-62	SPDT	12.4 - 18	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.1	60	28	2,000	Yes	EAR99
<a href="#">PEWGS6014</a> 	WR-75	SPDT	10 - 15	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.05	75	12	3,500	Yes	EAR99
<a href="#">PEWGS6012</a> 	WR-75	SPDT	10 - 15	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.05	75	28	3,500	Yes	EAR99
<a href="#">PEWGS6015</a> 	WR-75	SPDT	10 - 15	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.05	75	12	3,500	Yes	EAR99
<a href="#">PEWGS6013</a> 	WR-75	SPDT	10 - 15	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.05	75	28	3,500	Yes	EAR99
<a href="#">PEWGS6018</a> 	WR-90	SPDT	8.2 - 12.4	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.07	80	12	5,000	Yes	EAR99
<a href="#">PEWGS6016</a> 	WR-90	SPDT	8.2 - 12.4	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.07	80	28	5,000	Yes	EAR99
<a href="#">PEWGS6019</a> 	WR-90	SPDT	8.2 - 12.4	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.07	80	12	5,000	Yes	EAR99
<a href="#">PEWGS6017</a> 	WR-90	SPDT	8.2 - 12.4	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.07	80	28	5,000	Yes	EAR99
<a href="#">PEWGS6038</a> 	WR-102	SPDT/DPDT	7 - 11	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.06	80	12	6,000	Yes	EAR99
<a href="#">PEWGS6036</a> 	WR-102	SPDT/DPDT	7 - 11	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.06	80	28	6,000	Yes	EAR99
<a href="#">PEWGS6039</a> 	WR-102	SPDT/DPDT	7 - 11	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.06	80	12	6,000	Yes	EAR99
<a href="#">PEWGS6037</a> 	WR-102	SPDT/DPDT	7 - 11	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.06	80	28	6,000	Yes	EAR99
<a href="#">PEWGS6022</a> 	WR-112	SPDT	7.05 - 10	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.05	80	12	7,000	Yes	EAR99
<a href="#">PEWGS6020</a> 	WR-112	SPDT	7.05 - 10	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.05	80	28	7,000	Yes	EAR99














## Waveguide Electromechanical Relay Switches Continued

PE P/N	Waveguide Type	Switch Type	RF Freq. Range (GHz)	Actuator/Features	Insertion Loss (dB)	Isolation (dB)	DC Power (Volts)	Power Rating (Watts)	ROHS Compliant	ECCN
<a href="#">PEWGS6023</a> 	WR-112	SPDT	7.05 - 10	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.05	80	12	7,000	Yes	EAR99
<a href="#">PEWGS6021</a> 	WR-112	SPDT	7.05 - 10	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.05	80	28	7,000	Yes	EAR99
<a href="#">PEWGS6026</a> 	WR-137	SPDT	5.85 - 8.2	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.02	70	12	12,000	Yes	EAR99
<a href="#">PEWGS6024</a> 	WR-137	SPDT	5.85 - 8.2	Break Before Make, Latching, Self Cut Off, Window Indicator, Manual Override	0.02	70	28	12,000	Yes	EAR99
<a href="#">PEWGS6027</a> 	WR-137	SPDT	5.85 - 8.2	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.02	70	12	12,000	Yes	EAR99
<a href="#">PEWGS6025</a> 	WR-137	SPDT	5.85 - 8.2	Break Before Make, Latching, TTL Logic, Self Cut Off, Window Indicator, Manual Override	0.02	70	28	12,000	Yes	EAR99
<a href="#">PEWGS6034</a> 	WR-159	SPDT/DPDT	4.9 - 7.05	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.06	70	12	12,000	Yes	EAR99
<a href="#">PEWGS6032</a> 	WR-159	SPDT/DPDT	4.9 - 7.05	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.06	70	28	12,000	Yes	EAR99
<a href="#">PEWGS6033</a> 	WR-159	SPDT/DPDT	4.9 - 7.05	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.06	70	12	12,000	Yes	EAR99
<a href="#">PEWGS6035</a> 	WR-159	SPDT/DPDT	4.9 - 7.05	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.06	70	12	12,000	Yes	EAR99
<a href="#">PEWGS6030</a> 	WR-187	SPDT/DPDT	3.95 - 5.85	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.02	80	12	22,000	Yes	EAR99
<a href="#">PEWGS6028</a> 	WR-187	SPDT/DPDT	3.95 - 5.85	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.02	80	28	22,000	Yes	EAR99
<a href="#">PEWGS6031</a> 	WR-187	SPDT/DPDT	3.95 - 5.85	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.002	80	12	22,000	Yes	EAR99
<a href="#">PEWGS6029</a> 	WR-187	SPDT/DPDT	3.95 - 5.85	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.02	80	28	22,000	Yes	EAR99



## Double Ridge Waveguide Electromechanical Relay Switches

PE P/N	Waveguide Type	Switch Type	RF Freq. Range (GHz)	Actuator/Features	Insertion Loss (dB)	Isolation (dB)	DC Power (Volts)	Power Rating (Watts)	ROHS Compliant	ECCN
<a href="#">PEWGS6054</a> 	WRD-180	SPDT/DPDT	18 - 40	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.4	50	12	2,000	Yes	EAR99
<a href="#">PEWGS6052</a> 	WRD-180	SPDT/DPDT	18 - 40	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.4	50	28	2,000	Yes	EAR99
<a href="#">PEWGS6055</a> 	WRD-180	SPDT/DPDT	18 - 40	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.4	50	12	2,000	Yes	EAR99
<a href="#">PEWGS6053</a> 	WRD-180	SPDT/DPDT	18 - 40	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.4	50	28	2,000	Yes	EAR99
<a href="#">PEWGS6046</a> 	WRD-650	SPDT/DPDT	6.5 - 18	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.35	60	12	8,500	Yes	EAR99
<a href="#">PEWGS6044</a> 	WRD-650	SPDT/DPDT	6.5 - 18	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.35	60	28	8,500	Yes	EAR99
<a href="#">PEWGS6047</a> 	WRD-650	SPDT/DPDT	6.5 - 18	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.35	60	12	8,500	Yes	EAR99
<a href="#">PEWGS6045</a> 	WRD-650	SPDT/DPDT	6.5 - 18	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.35	60	28	8,500	Yes	EAR99
<a href="#">PEWGS6050</a> 	WRD-750	SPDT/DPDT	7.5 - 18	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.3	60	12	8,500	Yes	EAR99
<a href="#">PEWGS6048</a> 	WRD-750	SPDT/DPDT	7.5 - 18	Latching, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.3	60	28	8,500	Yes	EAR99
<a href="#">PEWGS6051</a> 	WRD-750	SPDT/DPDT	7.5 - 18	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.3	60	12	8,500	Yes	EAR99
<a href="#">PEWGS6049</a> 	WRD-750	SPDT/DPDT	7.5 - 18	Latching, TTL Logic, Self Cut Off, Set Indicators, Manual Override, Viewing Window	0.3	60	28	8,500	Yes	EAR99






## Waveguide Isolators

PE P/N	Waveguide Type	RF Frequency Range (GHz)	Minimum Isolation (dB)	Maximum Insertion Loss (dB)	Maximum VSWR	Flange Type	ECCN
<a href="#">PEWIR1000</a> 	WR-10	75000-110000	25	2.3	1.5:1	UG-387/U-Mod	
<a href="#">PEWIR1001</a> 	WR-12	60000-90000	25	2	1.5:1	UG-387/U	
<a href="#">PEWIR1002</a> 	WR-15	50000-75000	25	1.8	1.4:1	UG-385/U	
<a href="#">PEWIR1003</a> 	WR-19	40000-60000	25	1.6	1.4:1	UG-383/U-Mod	
<a href="#">PEWIR1004</a> 	WR-22	33000-50000	25	1.5	1.4:1	UG-383/U	
<a href="#">PEWIR1005</a> 	WR-28	26500-40000	25	1.2	1.4:1	UG-599/U	
<a href="#">PEWIR1011</a> 	WR-28	26500-40000				UG-599/U	
<a href="#">PEWIR1015</a> 	WR-28	26500-40000				UG-599/U	
<a href="#">PEWIR1010</a> 	WR-42	18000-26500				UG-597/U	
<a href="#">PEWIR1009</a> 	WR-62	12400-18000				UG-1665/U	
<a href="#">PEWIR1008</a> 	WR-75	10000-15000					
<a href="#">PEWIR1007</a> 	WR-90	8200-12400				UG-135/U	
<a href="#">PEWIR1006</a> 	WR-112	7050-10000				UG-138/U	

## Waveguide Polarizers

PE P/N	Band	RF Frequency Range (GHz)	Typical Bandwidth (GHz)	Typical Insertion Loss (dB)	Typical Axial Ratio (dB)	Length (in)	Flange Type	ECCN
<a href="#">PEWPL0000</a> 	Ku	14.0 - 16.0	±1	0.5	1.1	3	Square Cover UG-419/U-Mod	EAR99
<a href="#">PEWPL0005</a> 	Ka	26.0 - 33.0	±3.5	0.5	1.1	2	Square Cover UG-599/U-Mod	EAR99
<a href="#">PEWPL0008</a> 	V	57.5 - 62.5	±2.5	0.5	1.1	1	Round Cover UG-385/U-Mod	EAR99

## Waveguide Orthomode Transducers

PE P/N	RF Frequency Range (GHz)	H to A Insertion Loss (dB)	V to A Insertion Loss (dB)	H to V Isolation (dB)	H to A Cross Polarization (dB)	V to A Cross Polarization (dB)	Waveguide Type	ECCN
<a href="#">PEWOT0014</a> 	8.2 - 12.4						WR-90	EAR99
<a href="#">PEWOT0001</a> 	24.0 - 33.0	0.6	0.5	45	35	35	WR-34	EAR99
<a href="#">PEWOT0007</a> 	26.5 - 40.0	0.5	0.5	40	35	35	WR-28	EAR99
<a href="#">PEWOT0003</a> 	30.0 - 42.0	0.5	0.5	40	35	35	WR-28	EAR99
<a href="#">PEWOT0009</a> 	60.0 - 90.0	1.2	0.8	40	35	35	WR-12	EAR99



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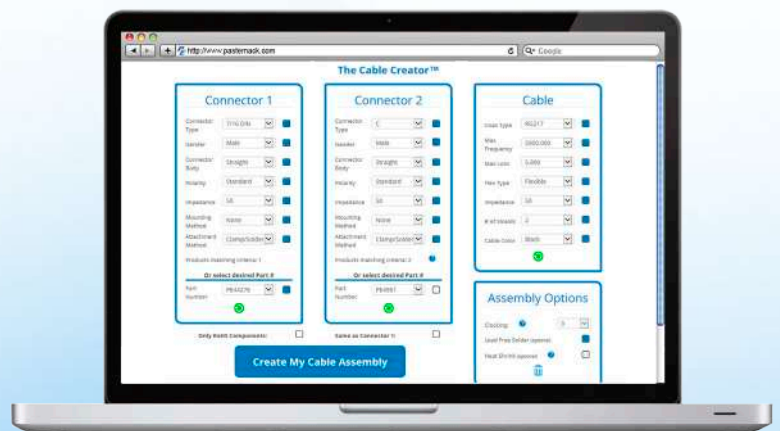
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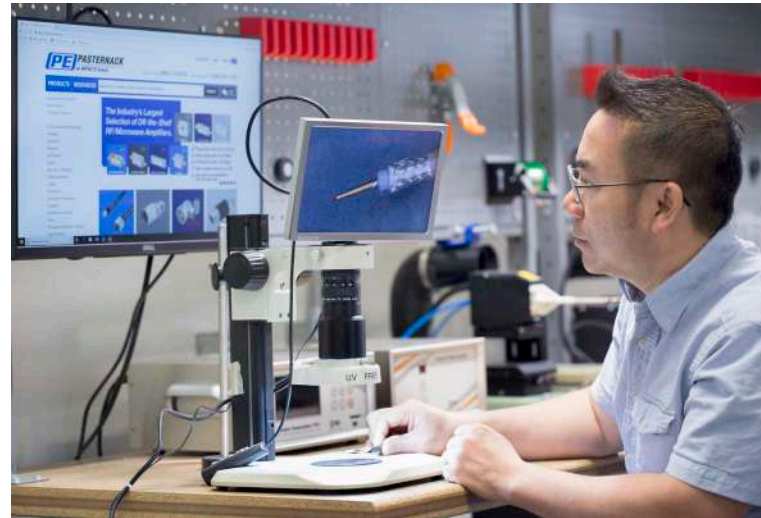




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