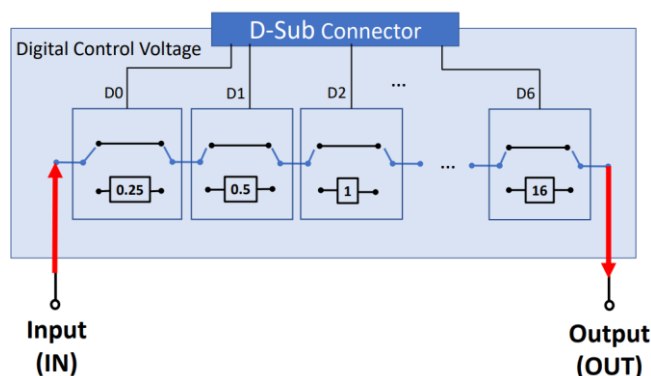




RoHS Compliant



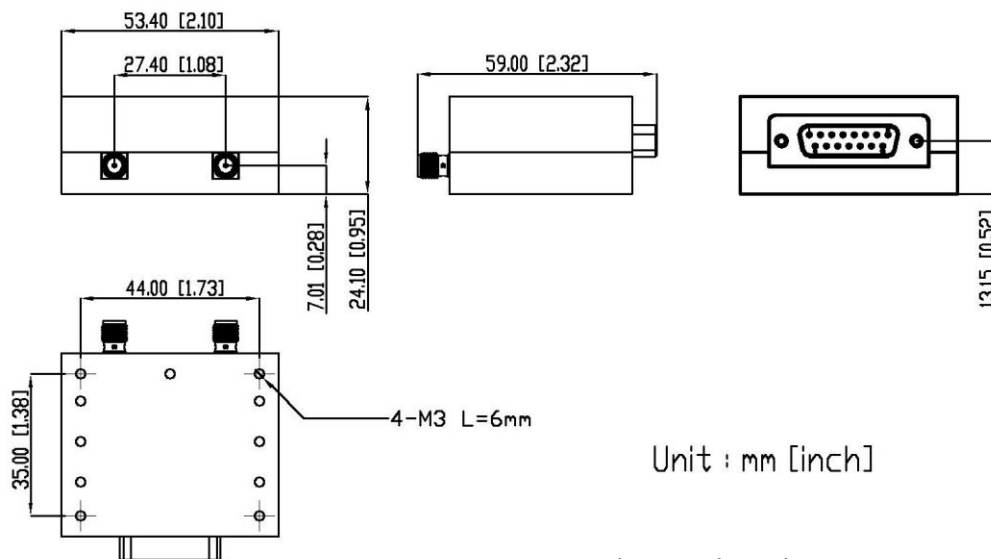
Electrical Schematic

Electrical Specifications

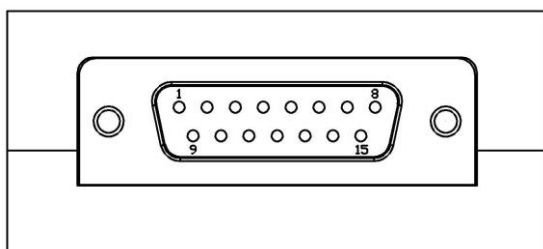
Parameter	Unit	Frequency (MHz)	Conditions		Min.	Typ.	Max.
Attenuation Range	dB	200 - 6000			0		31.75
Step	dB					0.25	
Insertion Loss	dB		@ 0 dB Atn.			3.0	3.2
Attenuation Accuracy	dB		@ 0.25 dB Atn.			±0.02	±0.03
			@ 0.5, 1, 2 dB Atn.			±0.08	±0.10
			@ 4, 8, 16 dB Atn.			±0.21	±0.32
			@ 31.75 dB Atn.			±0.94	±1.10
Input Operating Power (RF In and RF Out ports)	dBm						24
IP3 Input	dBm					51	
VSWR	:1		@ 0 dB Atn.	Input		1.53	1.54
				Output		1.48	
Attenuation Transition Time	ns					165	
Supply Voltage Range (V _{DD})	V				3		5.4
Control Voltage Threshold	V		Low	V _{DD} = 3.3 V	0		0.5
				V _{DD} = 5 V	0		0.8
			High	V _{DD} = 3.3 V	2		3.3
				V _{DD} = 5 V	3.5		5
Digital Control Voltage Range	V			0		V _{DD}	
Supply Current (I _{DD})	mA	V _{DD} = 3.3 V			0.3		
		V _{DD} = 5 V			0.6		

Operated in 50Ω system, 25°C environment.

Outline Drawing



Connectors: SMA Female, D-Sub Male

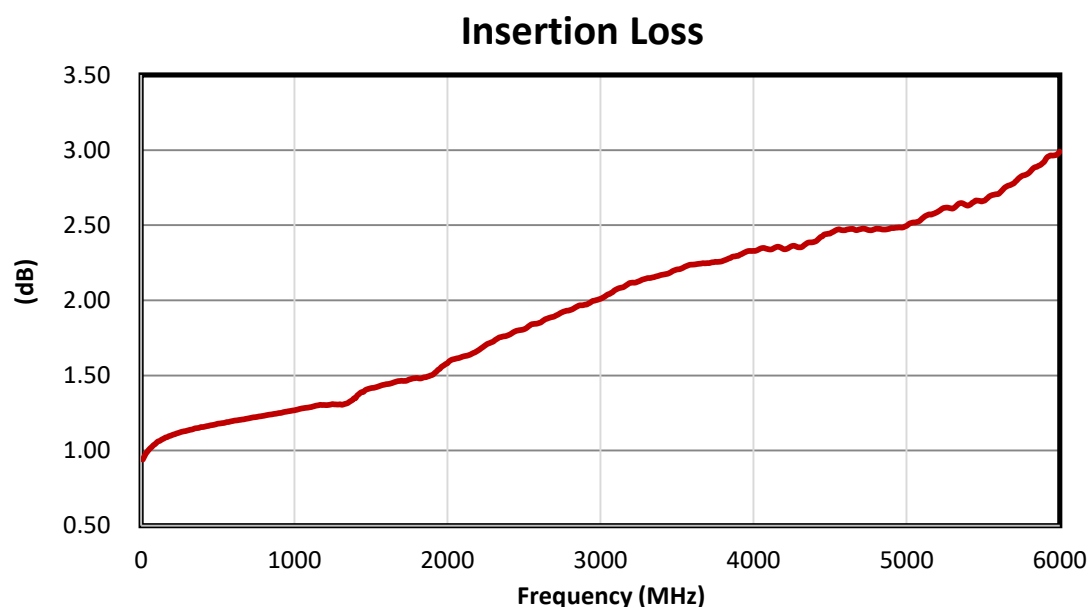
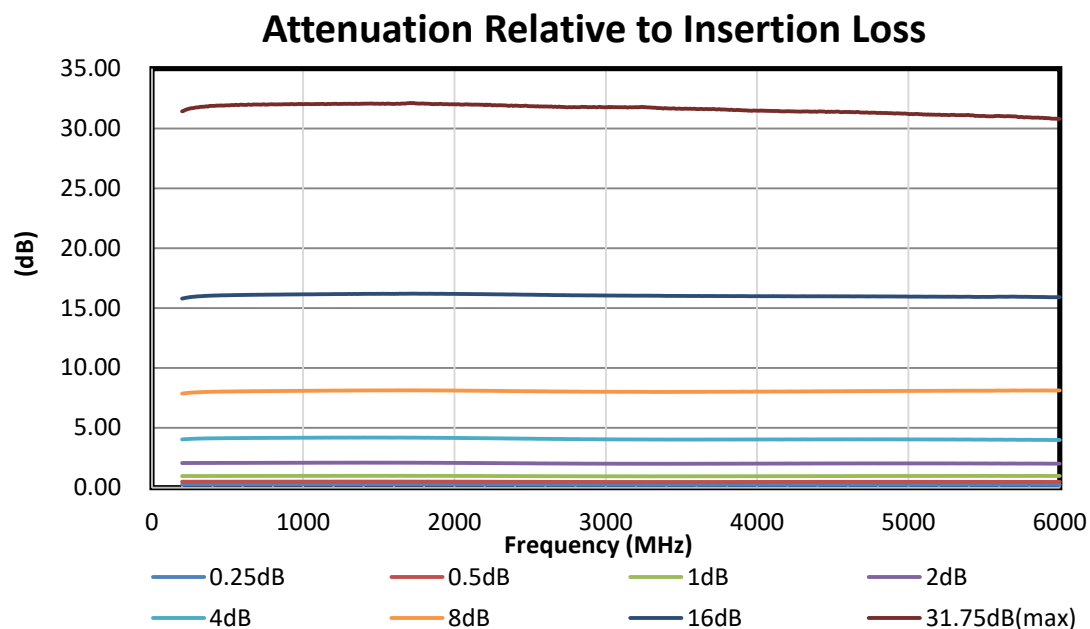


Pin Number Functions

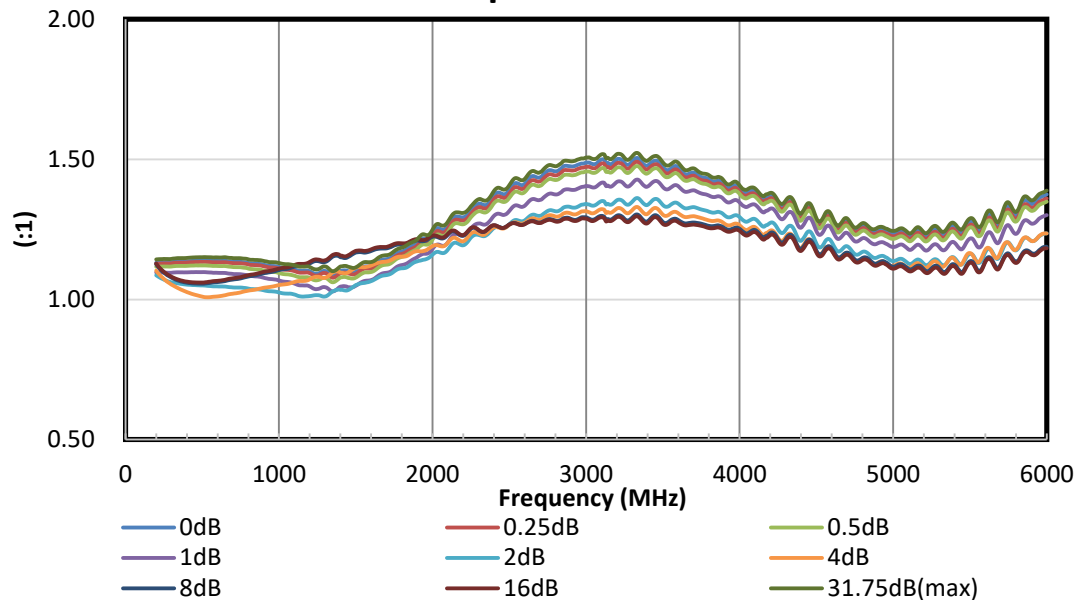
No.	15	14	13	12	11
Func.	D0	D1	D2	D3	D4
No.	10	9	8	7	6
Func.	D5	D6	V _{DD}	N/C	P/S(0V)
No.	5	4	3	2	1
Func.	N/C	N/C	GND	N/C	N/C

Digital Control Input							Attenuation
D0	D1	D2	D3	D4	D5	D6	State (dB)
Low	Low	Low	Low	Low	Low	Low	0 (reference)
High	Low	Low	Low	Low	Low	Low	0.25
Low	High	Low	Low	Low	Low	Low	0.5
Low	Low	High	Low	Low	Low	Low	1
Low	Low	Low	High	Low	Low	Low	2
Low	Low	Low	Low	High	Low	Low	4
Low	Low	Low	Low	Low	High	Low	8
Low	Low	Low	Low	Low	Low	High	16
High	High	High	High	High	High	High	31.75

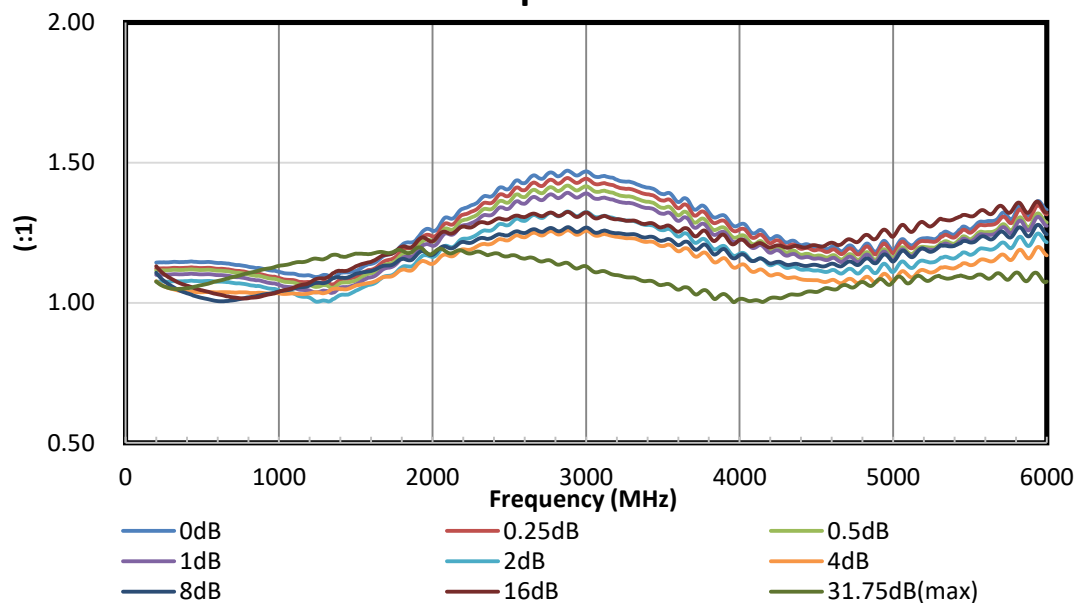
Typical Performance

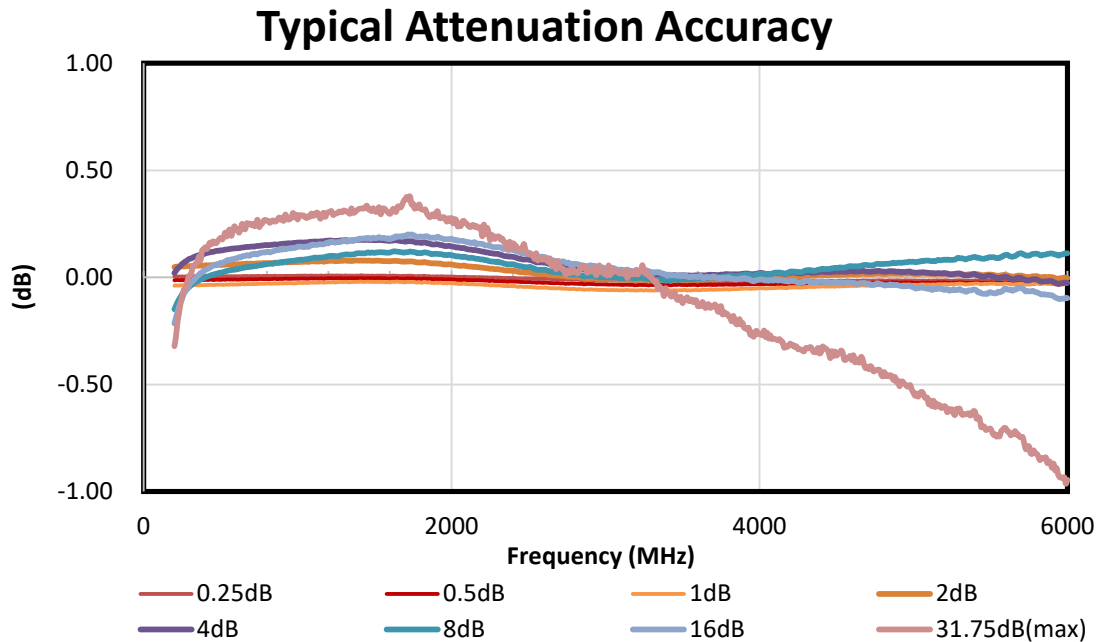


Input VSWR



Output VSWR





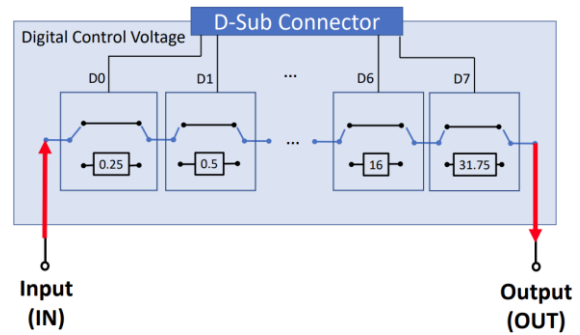
Typical performance S-parameter file: <https://www.amtery.com/en/goods-79>

For each S/N S-parameter file, go to <https://www.amtery.com/en/downloads>

Note: Specifications are subject to change without notice.



RoHS Compliant



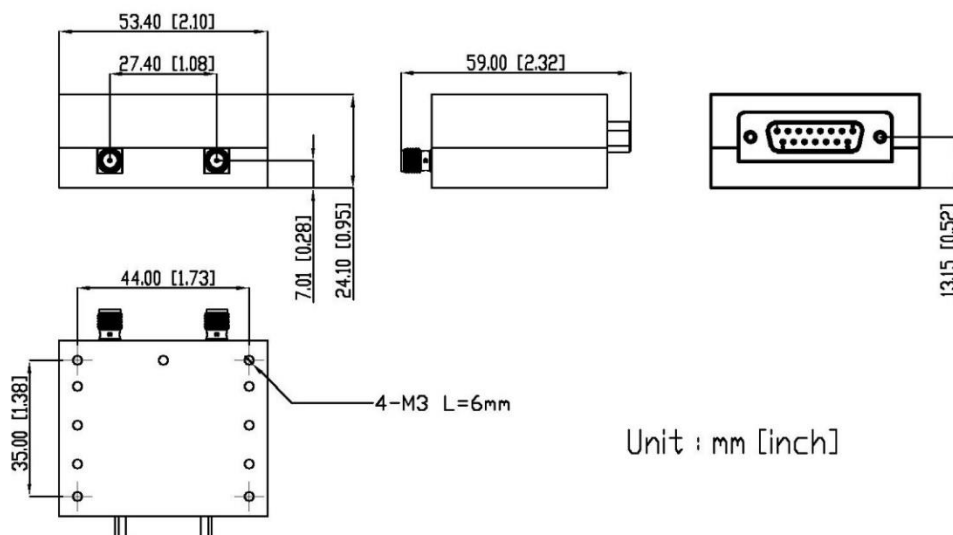
Electrical Schematic

Electrical Specifications

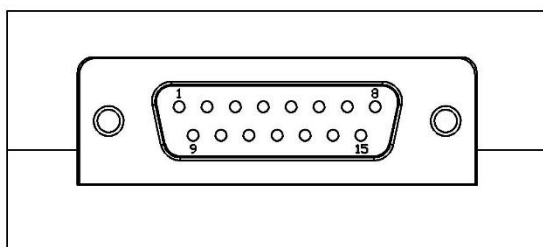
Parameter	Unit	Frequency (MHz)	Conditions		Min.	Typ.	Max.
Attenuation Range	dB	200 - 6000			0		63.5
Step	dB					0.25	
Insertion Loss	dB		@ 0 dB Atn.			5.5	5.7
Attenuation Accuracy	dB		@ 0.25 dB Atn.			±0.03	±0.04
			@ 0.5, 1, 2 dB Atn.			±0.07	±0.13
			@ 4, 8, 16 dB Atn.			±0.27	±0.32
			@ 31.75 dB Atn.			±0.74	±1.00
			@ 63.5 dB Atn.			±3.30	±3.50
Input Operating Power (RF In and RF Out ports)	dBm						24
IP3 Input	dBm					47	
VSWR	:1		@ 0 dB Atn.	Input		1.93	1.94
				Output		1.74	
Attenuation Transition Time	ns					205	
Supply Voltage Range (V _{DD})	V				3		5.4
Control Voltage Threshold	V		Low	V _{DD} = 3.3 V	0		0.5
				V _{DD} = 5 V	0		0.8
			High	V _{DD} = 3.3 V	2		3.3
				V _{DD} = 5 V	3.5		5
Digital Control Voltage Range	V				0		V _{DD}
Supply Current (I _{DD})	mA		V _{DD} = 3.3 V			0.6	
			V _{DD} = 5 V			1.2	

Operated in 50Ω system, 25°C environment.

Outline Drawing



Connectors: SMA Female, D-Sub Male

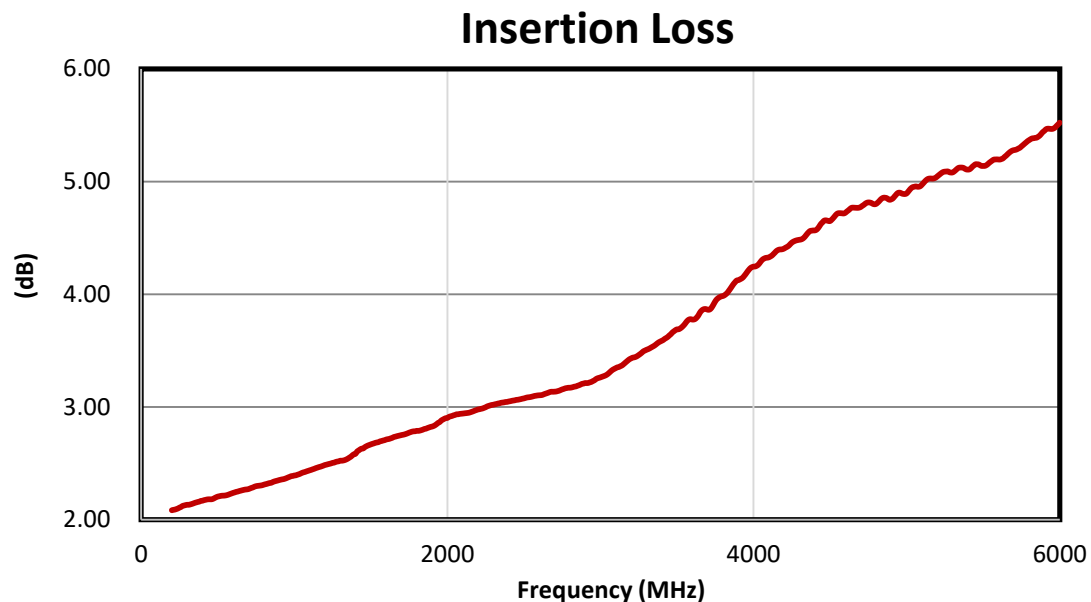
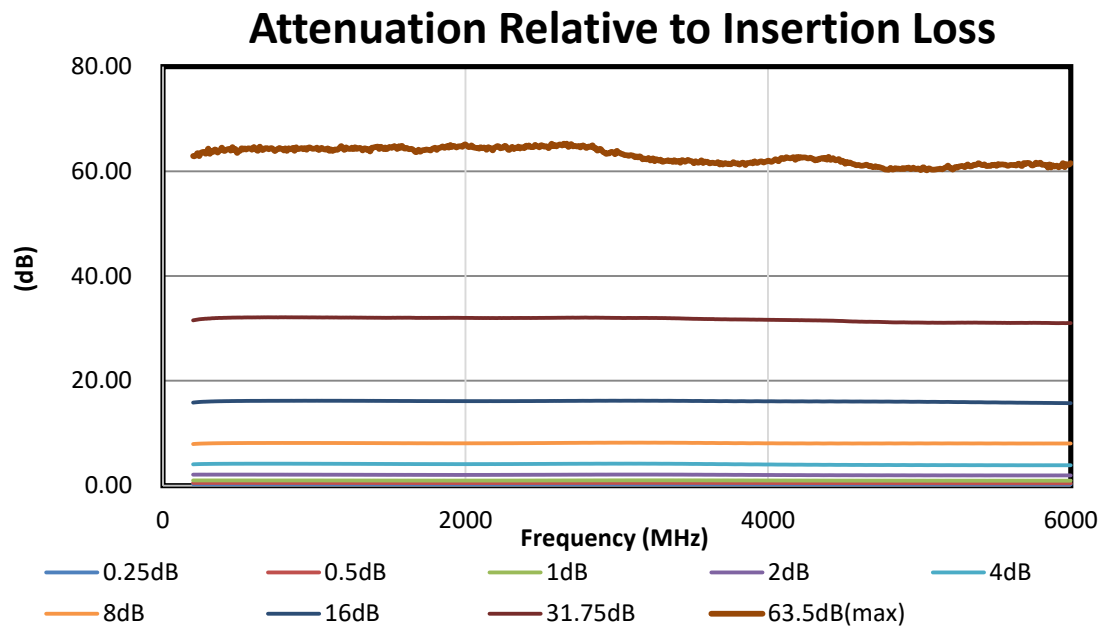


Pin Number Functions

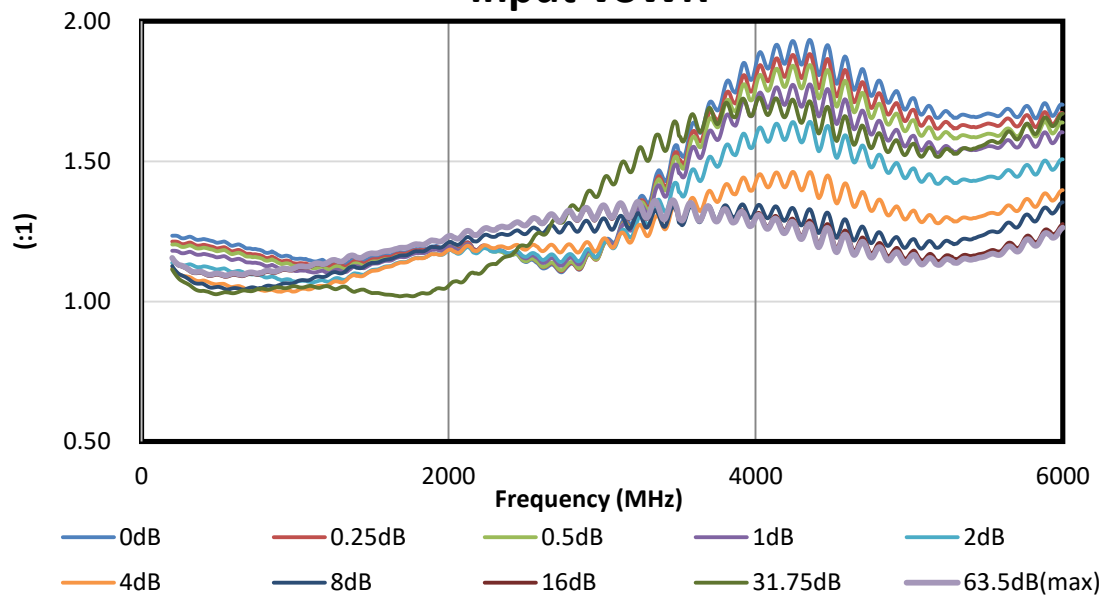
No.	15	14	13	12	11
Func.	D0	D1	D2	D3	D4
No.	10	9	8	7	6
Func.	D5	D6	V _{DD}	N/C	PS(0V)
No.	5	4	3	2	1
Func.	N/C	N/C	GND	N/C	D7

Digital Control Input								Attenuation State (dB)
D0	D1	D2	D3	D4	D5	D6	D7	
Low	Low	Low	Low	Low	Low	Low	Low	0 (reference)
High	Low	Low	Low	Low	Low	Low	Low	0.25
Low	High	Low	Low	Low	Low	Low	Low	0.5
Low	Low	High	Low	Low	Low	Low	Low	1
Low	Low	Low	High	Low	Low	Low	Low	2
Low	Low	Low	Low	High	Low	Low	Low	4
Low	Low	Low	Low	Low	High	Low	Low	8
Low	Low	Low	Low	Low	Low	High	Low	16
Low	Low	Low	Low	Low	Low	Low	High	31.75
High	High	High	High	High	High	High	High	63.5

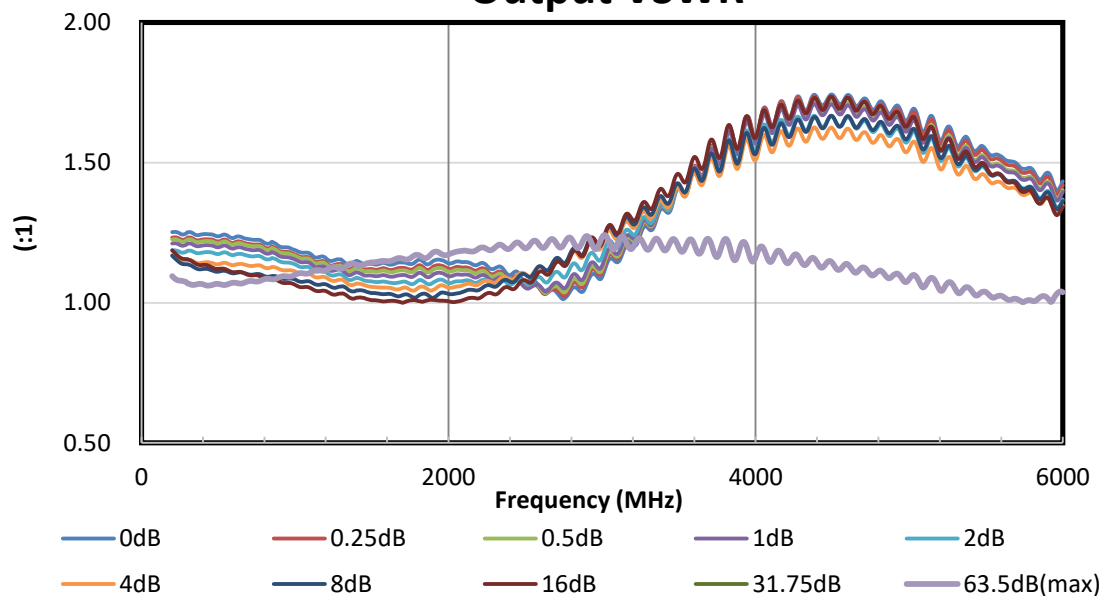
Typical Performance

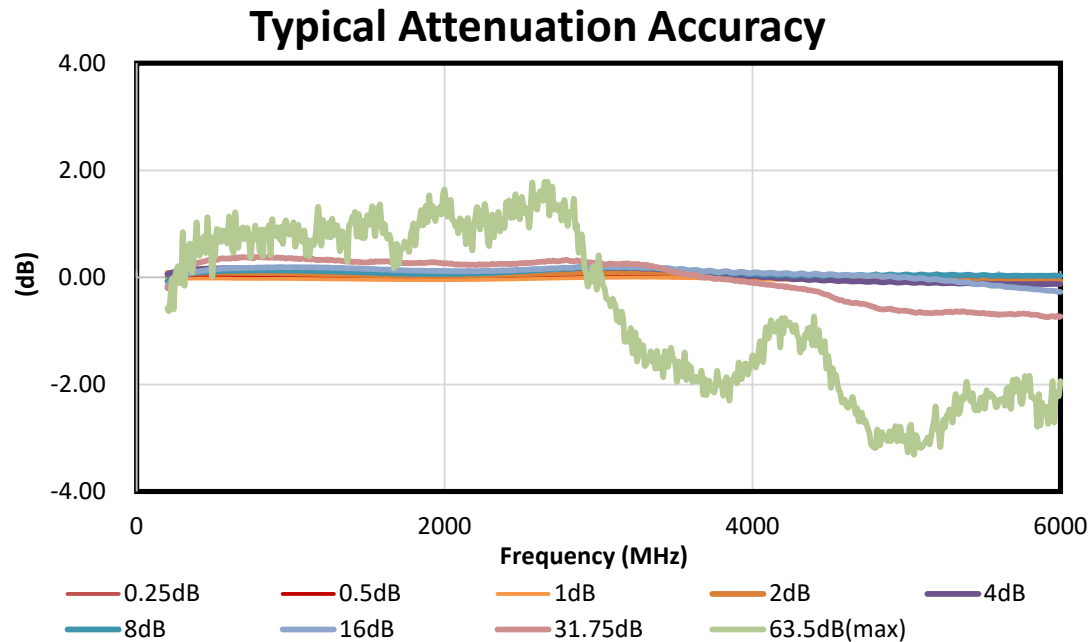


Input VSWR



Output VSWR





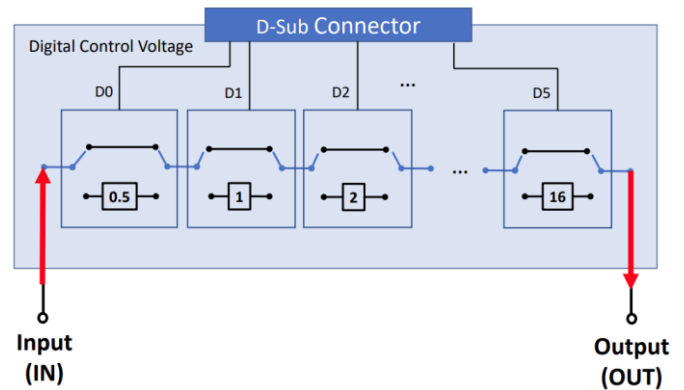
Typical performance S-parameter file: <https://www.amtery.com/en/goods-80>

For each S/N S-parameter file, go to <https://www.amtery.com/en/downloads>

Note: Specifications are subject to change without notice.



RoHS Compliant



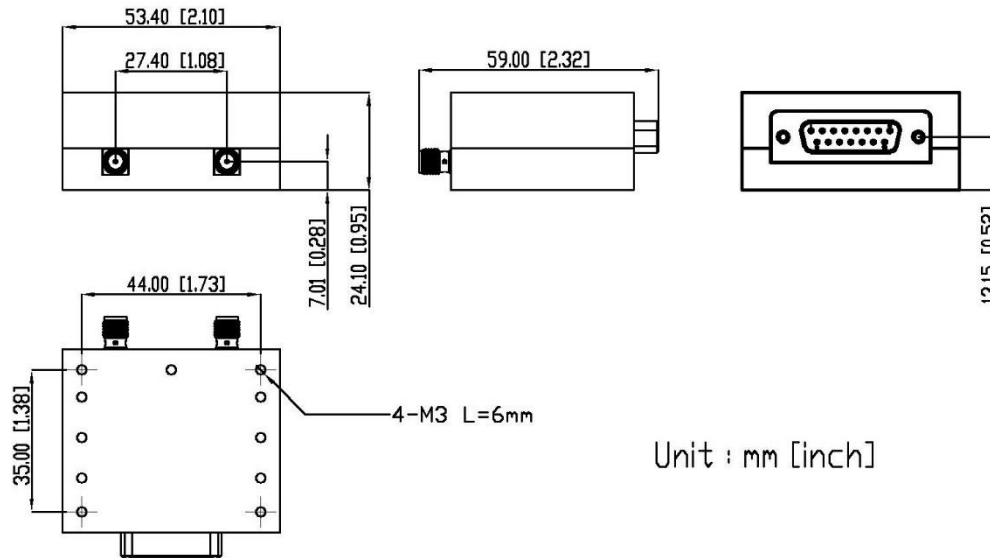
Electrical Schematic

Electrical Specifications

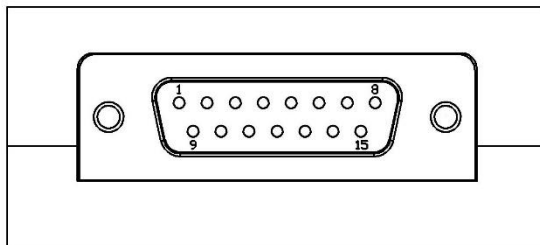
Parameter	Unit	Frequency (MHz)	Conditions		Min.	Typ.	Max.
Attenuation Range	dB	15 - 12000			0		31.5
Step	dB					0.5	
Insertion Loss	dB		@ 0 dB Atn.			5.4	5.6
Attenuation Accuracy	dB		@ 0.5 dB Atn.			±0.19	±0.23
			@ 1, 2, 4 dB Atn.			±0.30	±0.33
			@ 8, 16 dB Atn.			±0.64	±0.80
			@31.5 dB Atn.			±1.77	±1.90
Input Operating Power (RF In and RF Out ports)	dBm						25
IP3 Input	dBm					36	
VSWR	:1		@ 0 dB Atn.	Input		1.59	1.78
				Output		1.77	
Attenuation Transition Time	us					293	
Supply Voltage Range (V _{DD})	V				4.7		5.3
Control Voltage Threshold	V		Low		0		0.4
			High		3		5.3
Digital Control Voltage Range	V				0		5.3
Supply Current (I _{DD})	mA				2	5	

Operated in 50Ω system, 25°C environment.

Outline Drawing



Connectors: SMA Female, D-Sub Male



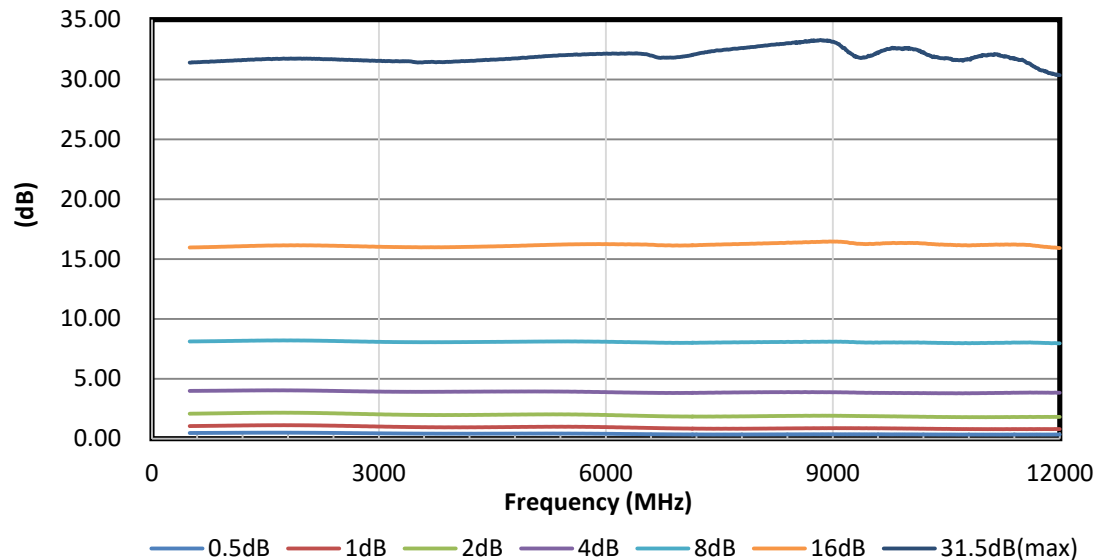
Pin Number Functions

No.	15	14	13	12	11
Func.	N/C	D5	D4	D3	D2
No.	10	9	8	7	6
Func.	D1	D0	N/C	N/C	N/C
No.	5	4	3	2	1
Func.	N/C	N/C	GND	V _{DD}	N/C

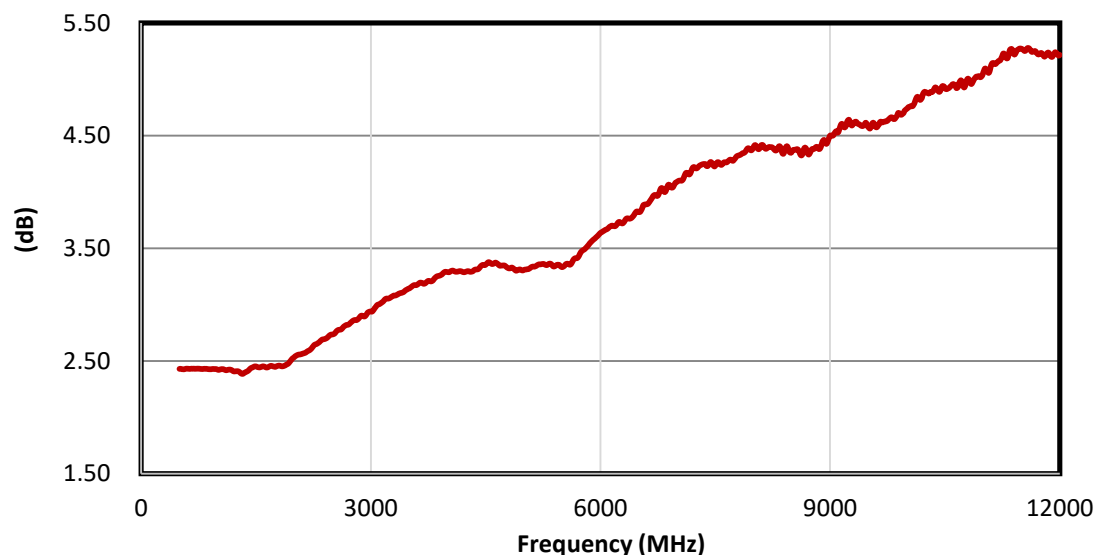
Digital Control Input						Attenuation State (dB)
D0	D1	D2	D3	D4	D5	
Low	Low	Low	Low	Low	Low	0 (reference)
High	Low	Low	Low	Low	Low	0.5
Low	High	Low	Low	Low	Low	1
Low	Low	High	Low	Low	Low	2
Low	Low	Low	High	Low	Low	4
Low	Low	Low	Low	High	Low	8
Low	Low	Low	Low	Low	High	16
High	High	High	High	High	High	31.5

Typical Performance

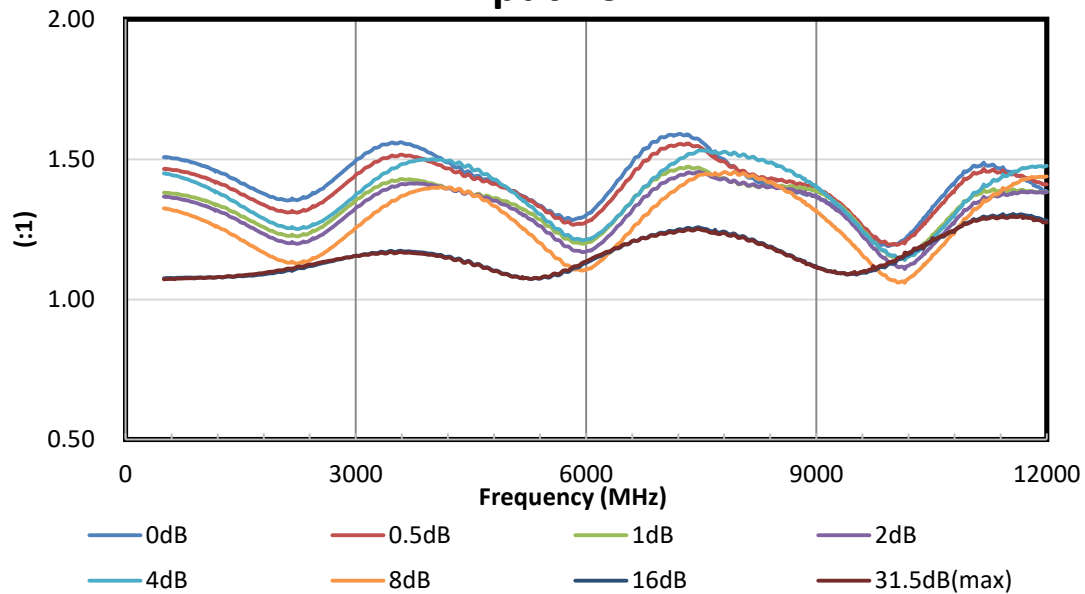
Attenuation Relative to Insertion Loss



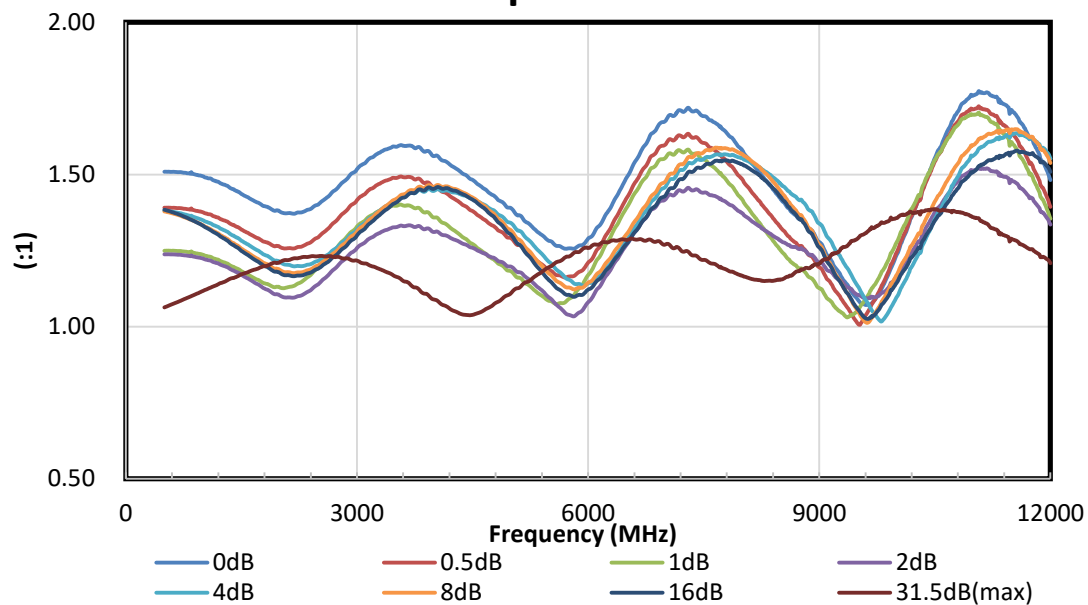
Insertion Loss



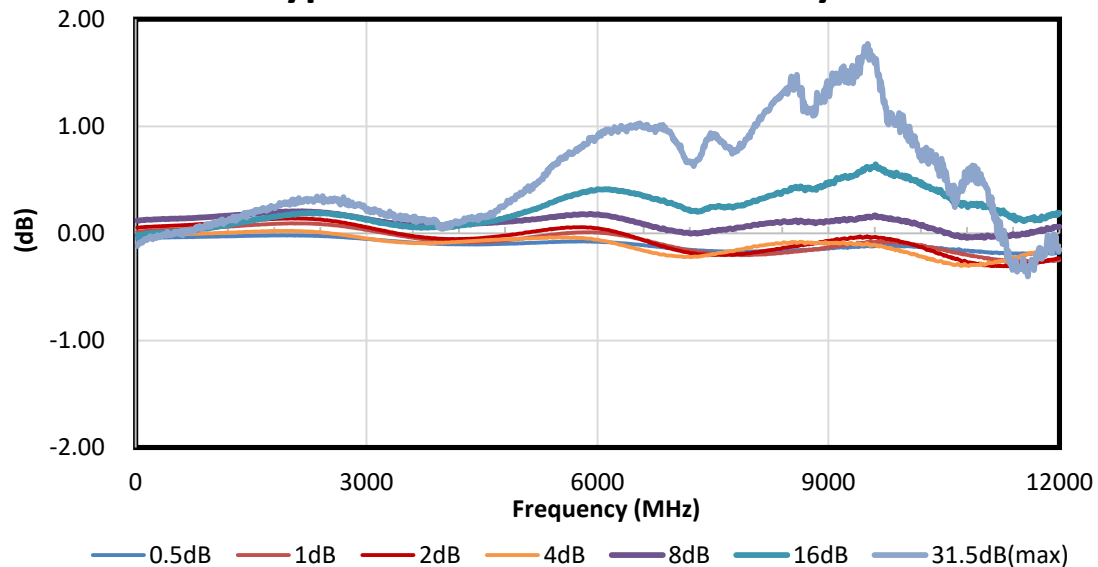
Input VSWR



Output VSWR



Typical Attenuation Accuracy



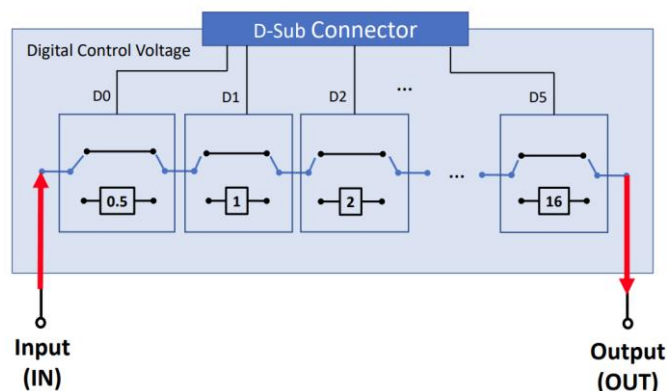
Typical performance S-parameter file: <https://www.amtery.com/en/goods-81>

For each S/N S-parameter file, go to <https://www.amtery.com/en/downloads>

Note: Specifications are subject to change without notice.



RoHS Compliant



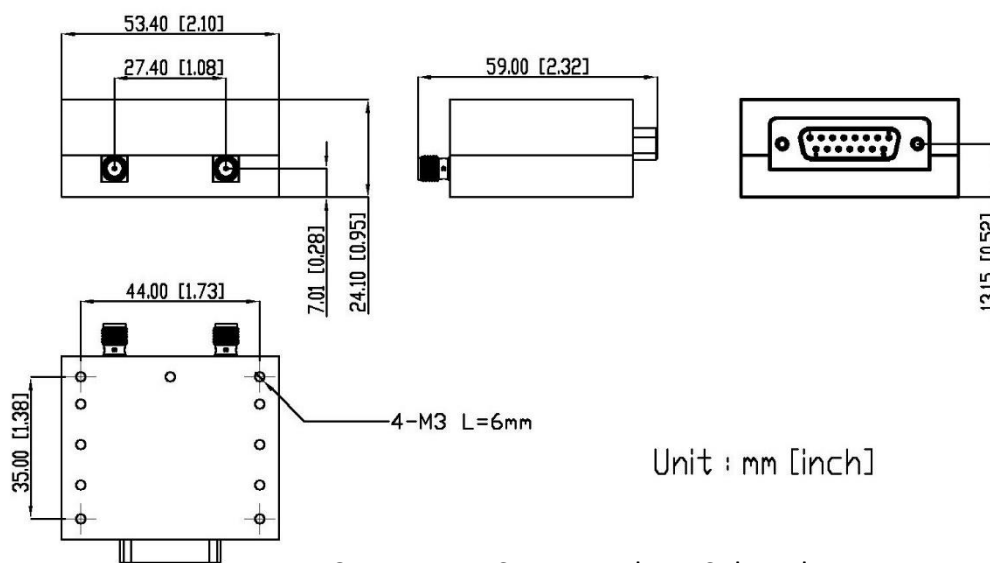
Electrical Schematic

Electrical Specifications

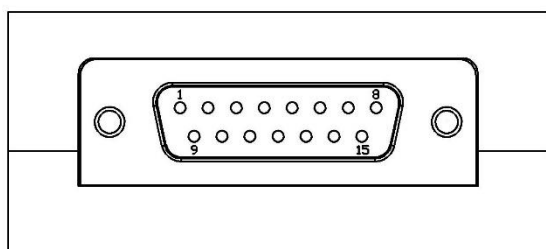
Parameter	Unit	Frequency (MHz)	Conditions		Min.	Typ.	Max.
Attenuation Range	dB	15 - 18000			0		31.5
Step	dB					0.5	
Insertion Loss	dB		@ 0 dB Atn.			4.6	4.8
Attenuation Accuracy	dB		@ 0.5 dB Atn.			±0.15	±0.18
			@ 1, 2, 4 dB Atn.			±0.18	±0.20
			@ 8, 16 dB Atn.			±0.36	±0.42
			@ 31.5 dB Atn.			±1.07	±1.17
Input Operating Power (RF In and RF Out ports)	dBm						27
IP3 Input	dBm					48	
VSWR	:1		@ 0 dB Atn.	Input		2.04	2.10
				Output		2.05	
Attenuation Transition Time	us					3.24	
Supply Voltage Range (V _{DD})	V				3.15		3.45
Control Voltage Threshold	V		Low		-0.3		0.3
			High		V _{DD} -0.3		V _{DD} +0.3
Digital Control Voltage Range	V				0		V _{DD} +0.3
Supply Current (I _{DD})	mA				0.3		

Operated in 50Ω system, 25°C environment.

Outline Drawing



Connectors: SMA Female, D-Sub Male

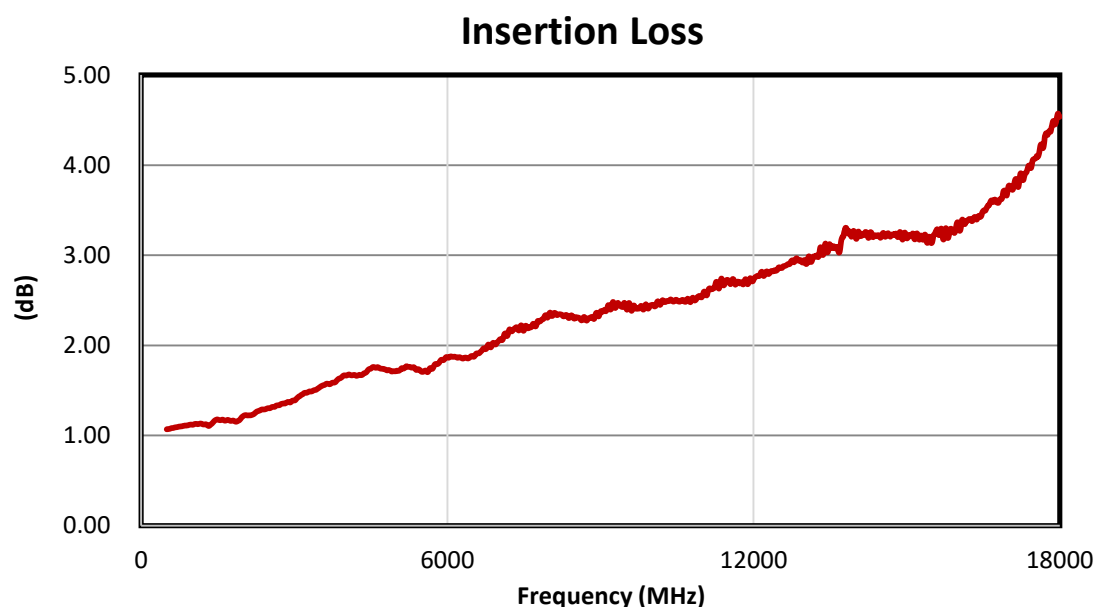
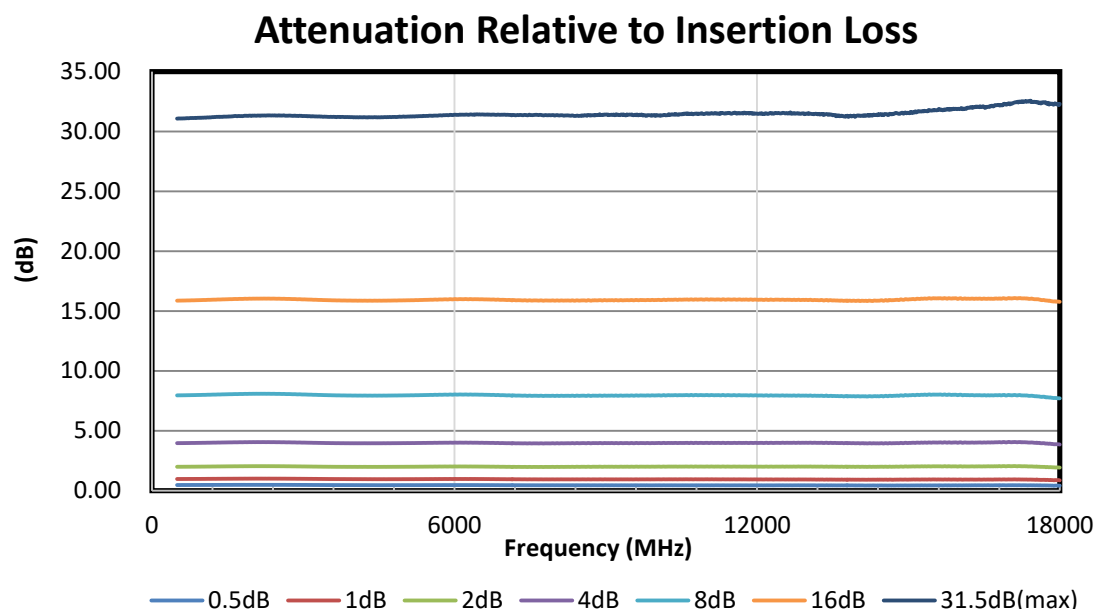


Pin Number Functions

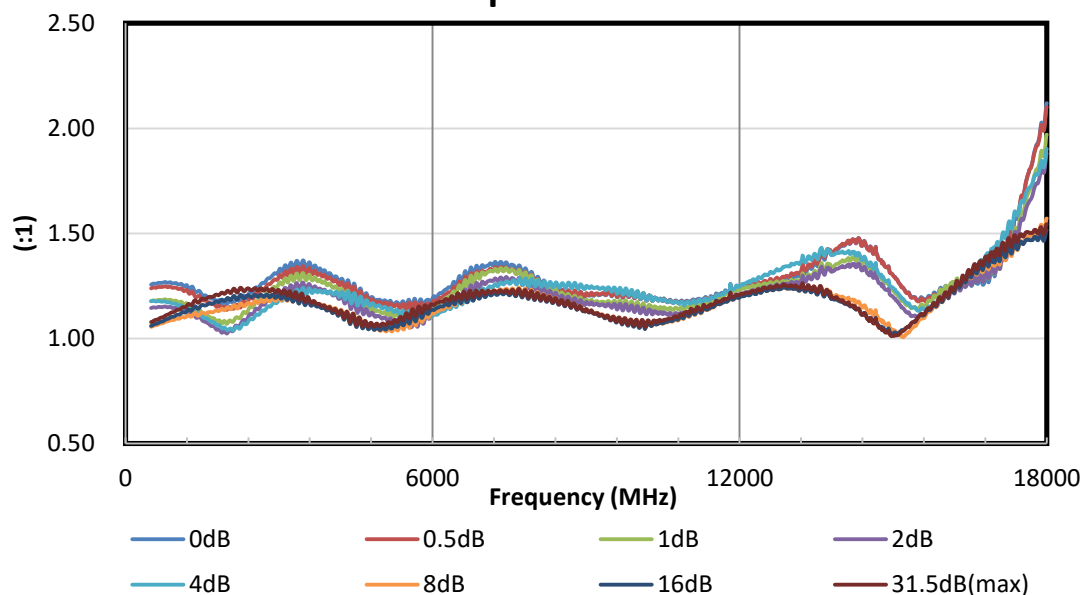
No.	15	14	13	12	11
Func.	N/C	D5	D4	D3	D2
No.	10	9	8	7	6
Func.	D1	D0	V _{DD}	N/C	N/C
No.	5	4	3	2	1
Func.	N/C	PS(0V)	GND	N/C	N/C

Digital Control Input						Attenuation State (dB)
D0	D1	D2	D3	D4	D5	
Low	Low	Low	Low	Low	Low	0 (reference)
High	Low	Low	Low	Low	Low	0.5
Low	High	Low	Low	Low	Low	1
Low	Low	High	Low	Low	Low	2
Low	Low	Low	High	Low	Low	4
Low	Low	Low	Low	High	Low	8
Low	Low	Low	Low	Low	High	16
High	High	High	High	High	High	31.5

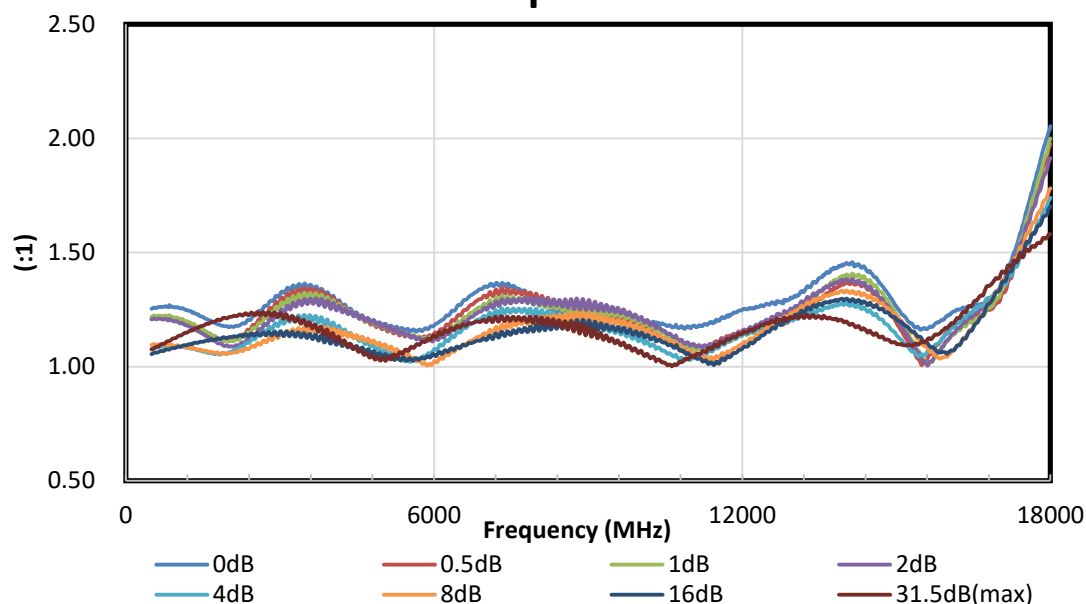
Typical Performance

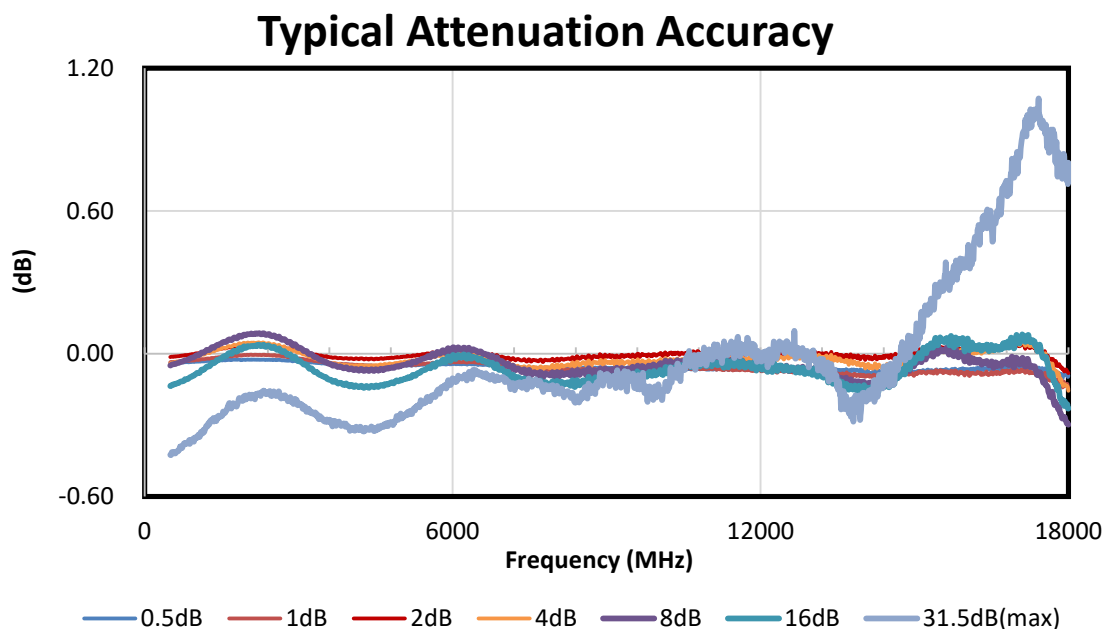


Input VSWR



Output VSWR





Typical performance S-parameter file: <https://www.amtery.com/en/goods-82>

For each S/N S-parameter file, go to <https://www.amtery.com/en/downloads>

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