

Precision Fixed Terminations

GENERAL INFORMATION



Fixed Terminations

A precision fixed termination (or load) consists of an immovable, (fixed) termination which, when mated to the end of a transmission line or cable, absorbs nearly all of the signal energy traveling toward it. An ideal "matched" condition exists when a termination with an impedance value of Z_0 , is connected to the end of a transmission line or cable that also has a characteristic impedance of Z_0 . Such an ideal "matched" condition (one with no mismatch between the termination and its mated line or cable) is critical if a voltage standing wave ratio (VSWR) of 1.0:1 is to be achieved in a system with a 50 or 75 ohm impedance value. Simply put, the more closely the 1.0:1 ratio is approached, the more accurate the measurements that can be made from a system.

Maury precision fixed terminations are designed to exacting specifications and are as close to the ideal impedance as it is mechanically possible to make them. The following pages provide detailed information about the various types of precision fixed terminations offered by Maury. Most are normally sold as components of Maury VNA calibration kits, but may also be purchased separately as replacement parts or spares.



Precision Fixed Terminations Available Models

Model	Sex	Connector Type	Frequency Range (GHz)	VSWR	Power Rating
7831A1	Female	1.85mm	DC — 1.0	1.02	0.5 watt CW 0.25 kW peak
7831B1	Male		1.0 — 10.0 10.0 — 26.5 26.5 — 67.0	1.07 1.10 1.20	
7931A2	Female	2.4mm	DC — 4.0	1.02	0.5 watt CW 0.25 kW peak
7931B2	Male		4.0 — 50.0	1.16	
8775A4	Female	2.92mm	DC — 4.0	1.02	0.5 watt CW 0.25 kW peak
8775B4	Male		4.0 — 40.0	1.12	
8031A6	Female	3.5mm	DC — 2.0	1.025	0.5 watt CW 0.25 kW peak
8031B6	Male		2.0 — 18.0 18.0 — 26.5	1.045 1.085	
2610F1	—	7mm	DC — 2.0 2.0 — 8.0 8.0 — 18.0	1.02 1.03 1.06	1 watt CW 1 kW peak
2510E2	Female	Type N	DC — 2.0	1.025	1 watt CW 1 kW peak
2510F2	Male		2.0 — 4.0 4.0 — 18.0	1.04 1.065	
8583A1	Female	BNC 75Ω	DC — 2.0	1.02	1 watt CW
8583B1	Male		2.0 — 4.0 4.0 — 12.0	1.04 1.10	
351A2	Female	BNC 50Ω	DC — 2.0	1.04	2 watt CW 1 kW peak
351B2	Male		2.0 — 4.0 4.0 — 10.0	1.10 1.20	
332E	Female	TNC	DC — 4.0	1.06	1 watt CW 1 kW peak
332F	Male		4.0 — 12.0 12.0 — 18.0	1.10 1.15	

