

Fixed Flush and Fixed Offset Shorts

GENERAL INFORMATION



Fixed flush and fixed offset short circuit terminations (shorts) are used to establish reference planes in transmission systems and as key elements in the calibration of vector network analyzers (VNAs). Offset shorts can be used for banded calibrations of VNA. Those with the longest offset are often used to evaluate the calibration effectiveness of a VNA by measuring the effective source match after calibration.

In general, the shorting plane of fixed flush shorts is at the connector reference plane, and at some predetermined offset in offset shorts.

Many of the shorts listed in this section are components of the Maury VNA calibration kits described on pages 109-118 of this catalog. Others are available as supplements to the components in these kits. In all cases, the specification “Phase Accuracy” is defined in this section as phase deviation from a nominal unit.

Available Models

Model	Sex	Connector Type	Frequency Range (GHz)	Phase Accuracy	Reflection Coefficient	Offset Length (Inches)
7846A	Female	1.85mm	DC — 67.0	± 4.0°	0.98	0.1968
7847A	Male					
7946A2	Female	2.4mm	DC — 50.0	± 2.0°	0.98	0.2000
7946B2	Male			N/A		1.2000
7946C2	Female					
7946D2	Male					
8771F4	Female	2.92mm	DC — 40.0	± 2.0°	0.98	0.1970
8772F4	Male			N/A		1.1803
8771A2	Female					
8772A2	Male					
8046F6	Female	3.5mm	DC — 26.5	± 2.0°	0.98	0.1970
8047F6	Male			N/A		1.1803
8046A6	Female					
8047A6	Male					
360D	Female	3.5mm\SMA*	DC — 40.0	± 2.0°	0.99	0.0000
360B	Male					
2615D3	-	7mm	DC — 18.0	± 0.3°	0.995	0.0000
2649A1	-			N/A		1.0050
8806G2	Female	Type N	DC - 18.0	± 2.0°	0.98	0.4972
8807C2	Male			N/A		0.9833
8806A2	Female					
8807A2	Male			N/A	1.1913	
8584A1	Female	BNC 75Ω	DC — 2.0	± 1.0°	0.98	0.3937
8584B1	Male		2.0 — 3.0	± 2.0°		
		3.0 — 12.0	± 6.0°			
361N2	Female	BNC 50Ω	DC — 12.4	± 5.0°	0.98	0.1410
361P2	Male					
8615A	Female	TNC	DC — 18.0	± 5.0°	0.98	0.5000
8615B	Male					0.7000
8686A	Female	AFTNC	DC — 20.0	± 2.0°	0.98	0.9833
8687A	Male					0.4915

* Flush shorts that can be used with SMA, 3.5mm and 2.92mm