

Wideband Single-Sided Power Divider 16-way SMA Female 500 MHz to 6 GHz

16-way SMA Power Divider 500 MHz to 6 GHz

Product Description

AmpliTech offers a wide selection of High-Quality RF power dividers, featuring Wilkinson design. Model APTPD-16-00500600-SMA-S is a 16-way power divider that operates from 500 MHz to 6 GHz in a small enclosure with versatile mounting options. This device is RoHS compliant.

The single-sided connector configuration is useful in rack mount applications where the input and outputs need to be readily accessible from the same panel.

Specifications	Min	Typ	Max	Min
Frequency	500		6000	MHz
Impedance		50		Ohm
Return Loss (Port S)	9.5	17		dB
Return Loss (Ports 1-16)	16	20		dB
Insertion Loss (Above 12.04 dB)		2.0	4.5	dB
Isolation	500-600 MHz	16		dB
	600-6000 MHz	18		
Amplitude Balance		0.5	1.2	dB
Phase Balance		4	16	Degrees
Input Power (CW) ¹			30	Watts

Mechanical

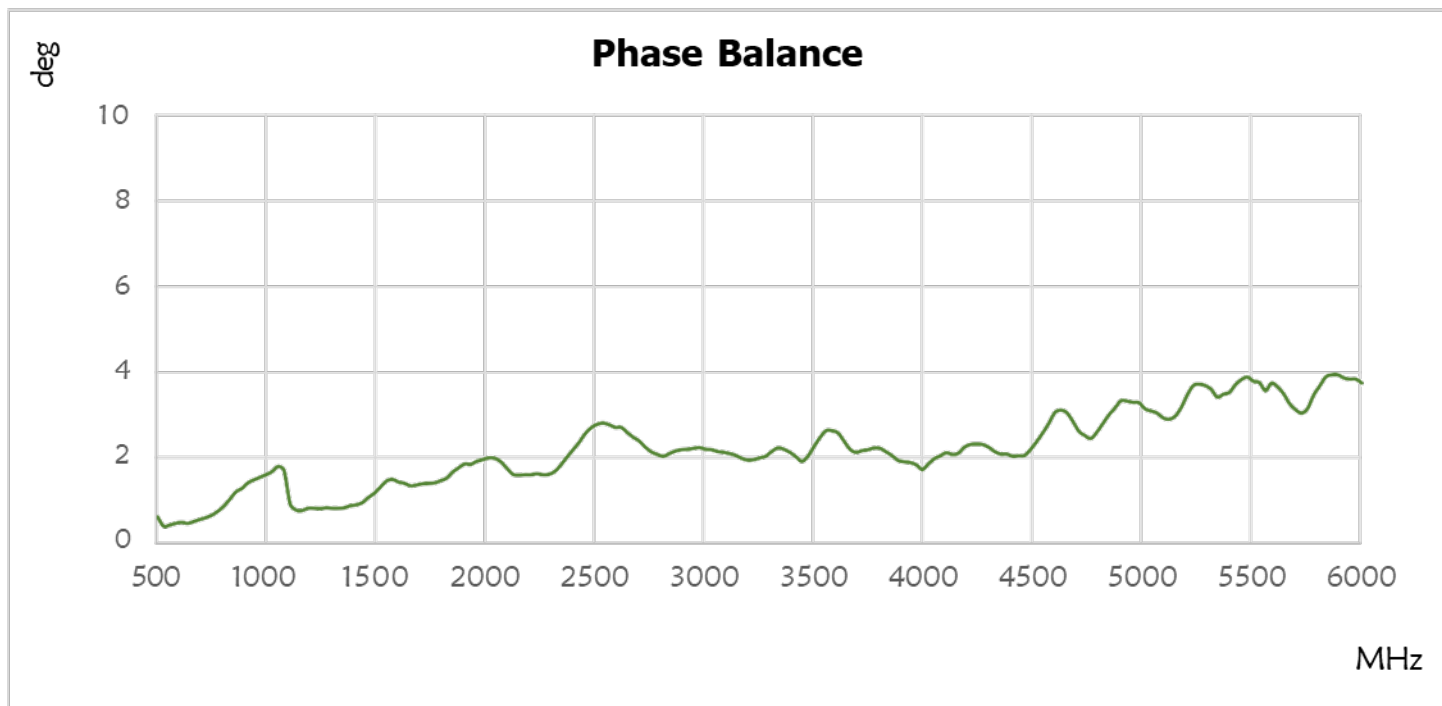
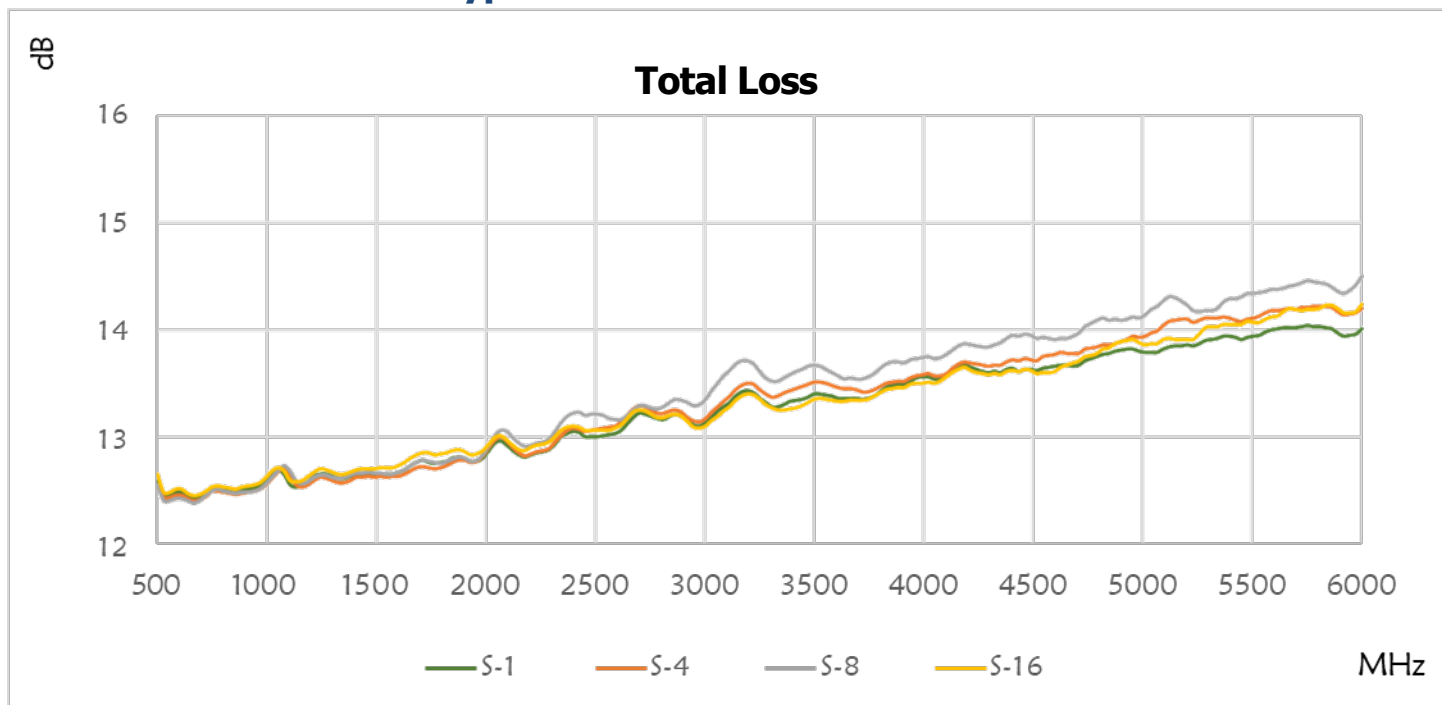
Connector Interface	SMA-Female
Operating Temperature ²	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	3.4 lb (1.54 kg)
Humidity	10-90% non-condensing
Environment	Indoors Use Only

Materials

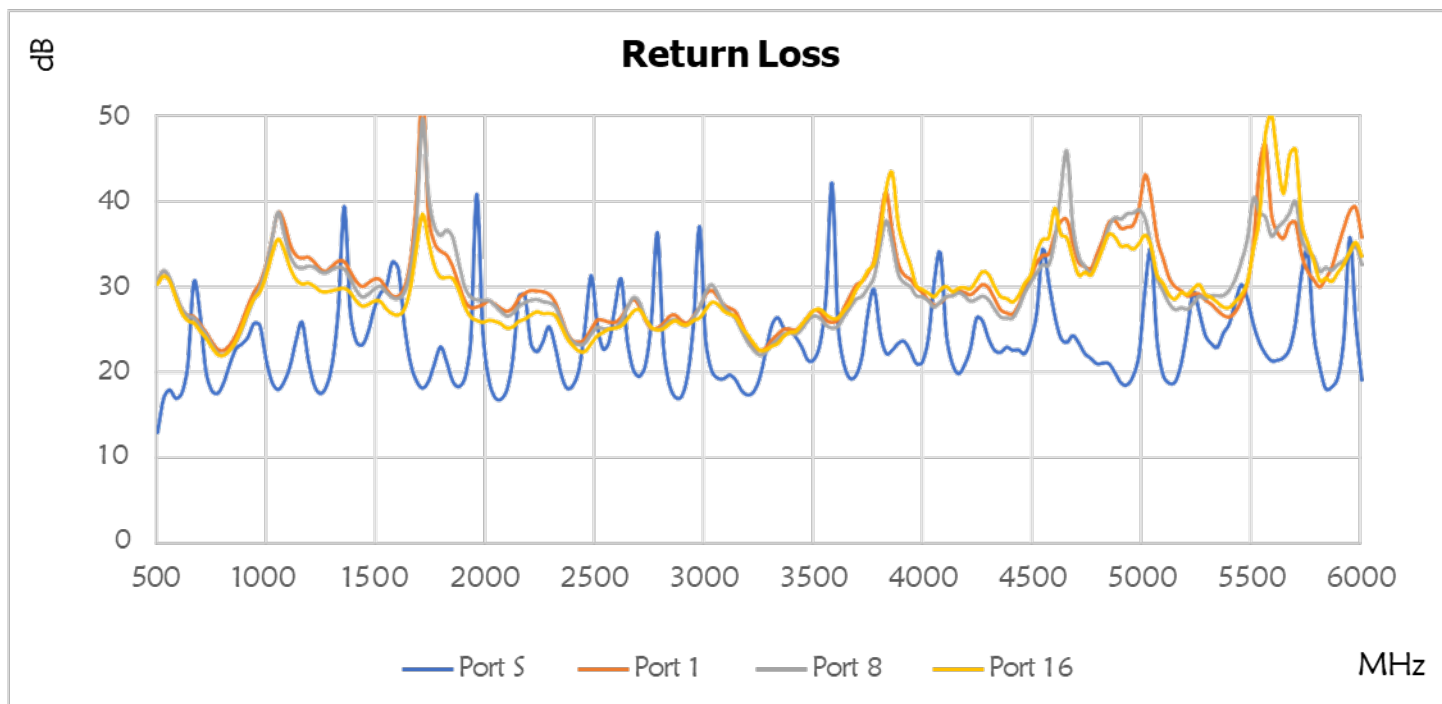
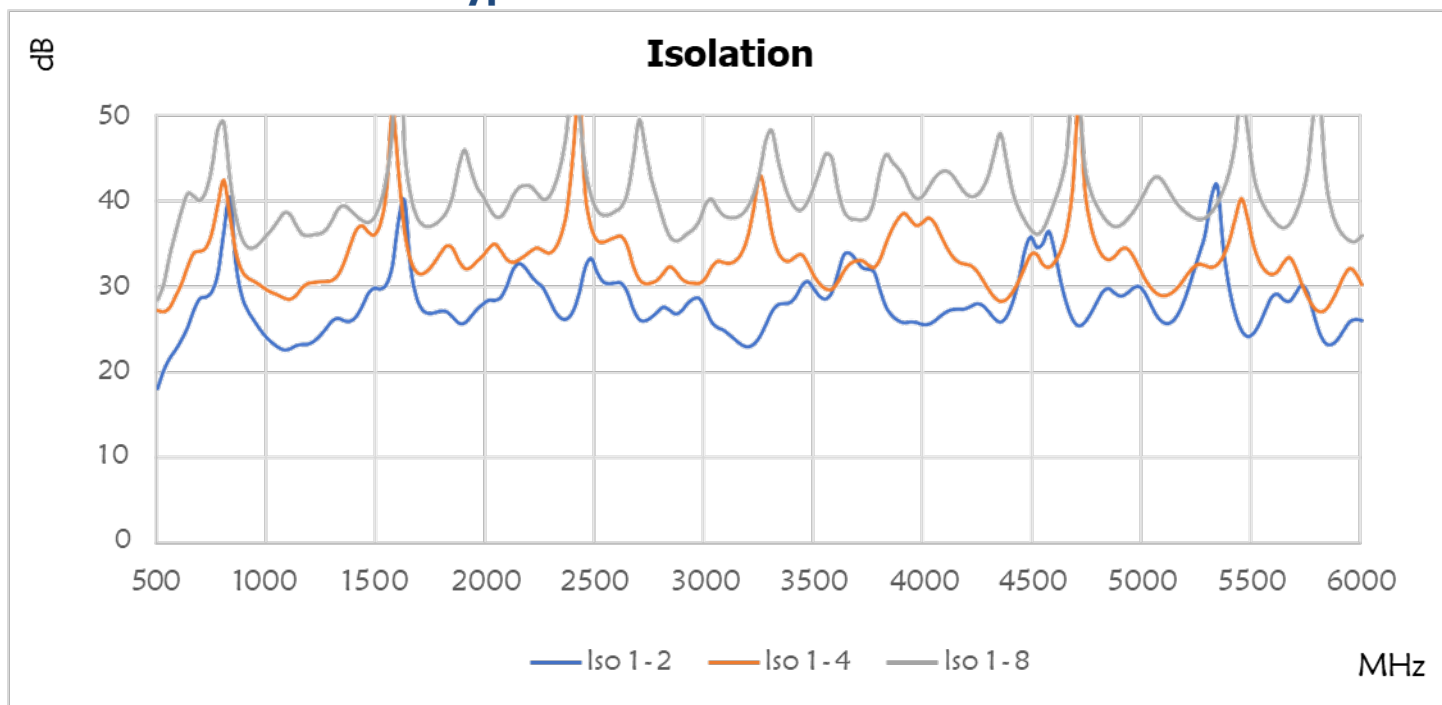
RoHS /REACH Compliant ³	Yes
Enclosure	Aluminum
Connectors	Brass, Gold Plated
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Clear Chem Film

1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
2. Electrical specifications at +25 °C only.
3. To the best of our knowledge at the time of publication.
4. Non-RoHS solder is available upon request.

Typical Performance at +25 °C



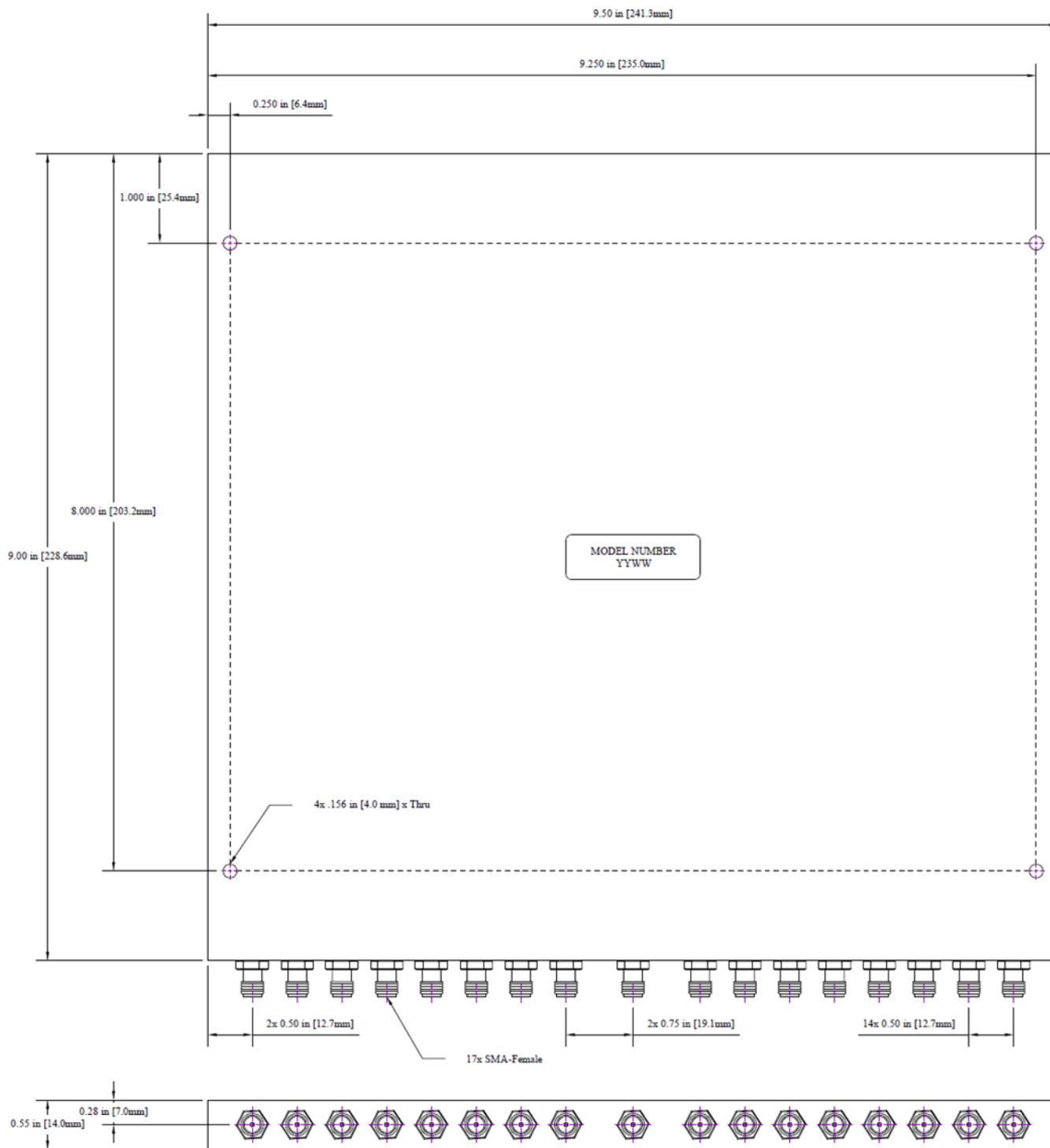
Typical Performance at +25 °C



Typical Performance Data at +25 °C

Frequency (MHz)	Return Loss (dB)				Total Loss (dB)			Isolation (dB)		
	Port 5	Port 1	Port 8	Port 16	S-1	S-8	S-16	1-2	1-4	1-8
500	13.2	31.0	31.0	30.4	12.58	12.55	12.65	18.2	27.3	28.5
610	17.7	27.6	27.6	27.1	12.48	12.42	12.51	23.9	30.5	39.0
720	20.4	24.9	24.6	24.2	12.47	12.45	12.49	28.9	34.6	41.2
830	21.1	23.4	22.7	22.8	12.49	12.48	12.52	40.6	38.3	42.8
940	25.9	29.5	28.7	28.7	12.52	12.49	12.55	26.1	30.7	34.6
995	21.7	32.7	32.3	31.4	12.60	12.56	12.62	24.2	29.8	36.0
1490	27.6	31.0	29.9	28.5	12.64	12.66	12.70	29.9	36.1	38.2
1985	25.0	28.1	28.5	26.0	12.80	12.83	12.87	28.0	33.7	40.7
2480	31.5	25.2	24.6	23.5	13.00	13.21	13.06	33.4	37.0	40.7
3003	24.0	29.2	29.5	27.5	13.13	13.35	13.10	27.5	31.1	39.7
3498	21.7	27.4	26.7	27.4	13.40	13.67	13.35	29.8	31.4	41.8
3993	21.4	29.4	29.0	29.8	13.56	13.74	13.50	25.7	37.5	40.6
4515	27.1	32.9	31.8	34.2	13.62	13.92	13.59	34.7	33.9	36.2
5010	29.9	43.2	38.1	36.2	13.79	14.14	13.86	29.3	31.0	41.2
5505	25.7	35.2	40.6	34.5	13.94	14.34	14.07	24.6	35.0	43.2
6000	19.3	35.9	32.7	33.7	14.01	14.50	14.24	26.1	30.3	36.0

Outline Dimensions



Dimensions are in inches, [mm] shown for convenience.
Tolerances on 2-pl decimals: $\pm .03$. 3-pl decimals: $\pm .015$.