

Wideband Power Divider 8-way SMA Female 2 to 18 GHz

8-way SMA Power Divider 2 to 18 GHz

Product Description

AmpliTech offers a wide selection of High-Quality RF power dividers, featuring Wilkinson design. Model APTPD-8-02001800-SMA is a wideband 8-way in-line power divider that operates from 2 to 18 GHz in an aluminum enclosure.

Specifications	Min	Typ	Max	Min
Frequency	2		18	GHz
Impedance		50		Ohm
Return Loss (Port S)	10	14		dB
Return Loss (Port 1-8)	14	20		dB
Insertion Loss (Above 9.03 dB)		1.1	2.4	dB
Isolation	16	19		dB
Amplitude Balance		0.4	1.0	dB
Phase Balance		2	10	Degrees
Input Power (CW) ¹			25	Watts

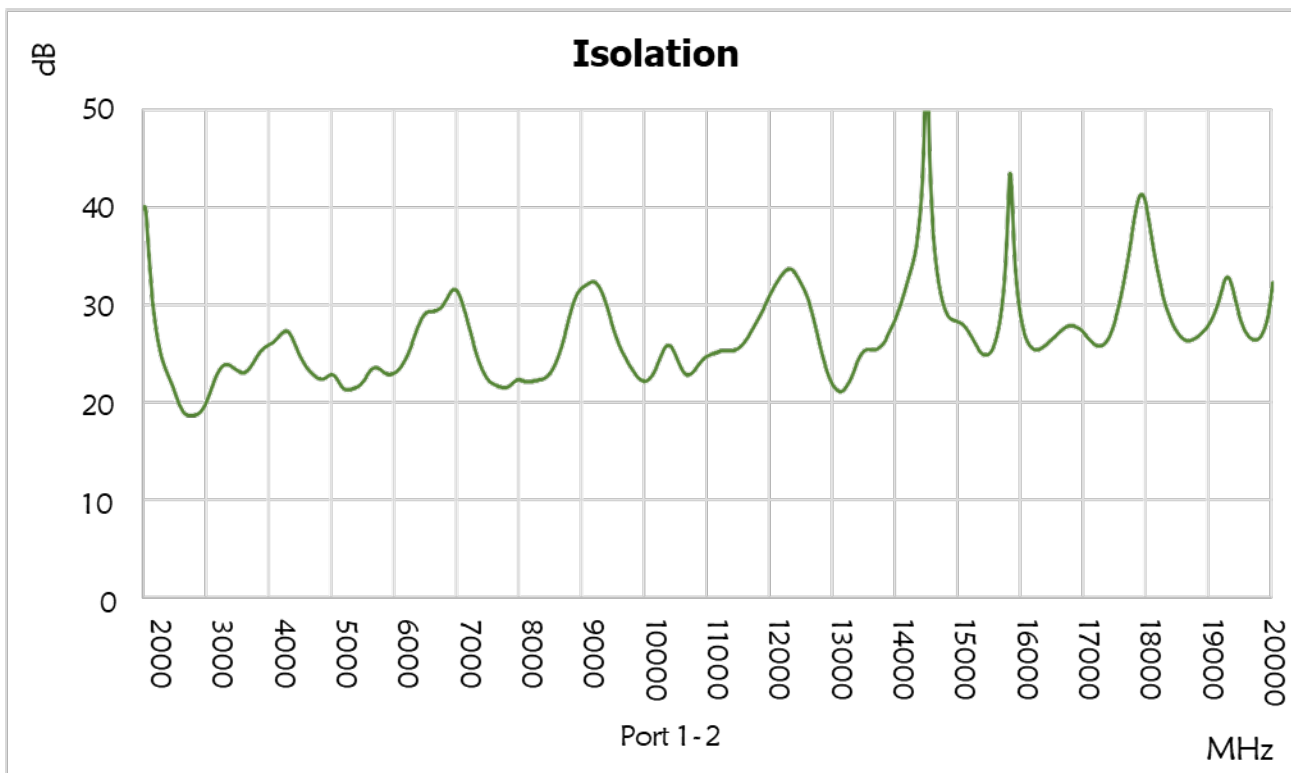
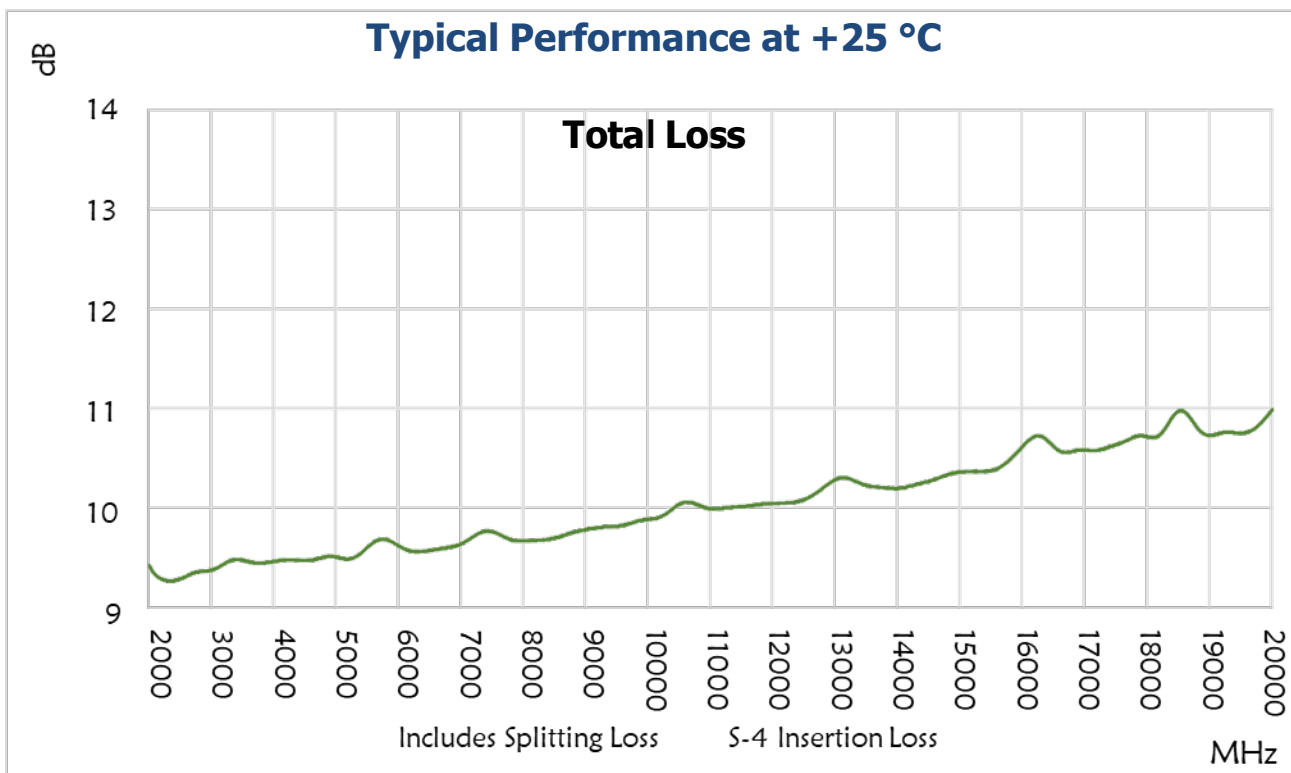
Mechanical

Connector Interface	SMA-Female
Operating Temperature ²	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	15 oz (425 g)
Humidity	10-90% non-condensing
Environment	Indoors Use Only

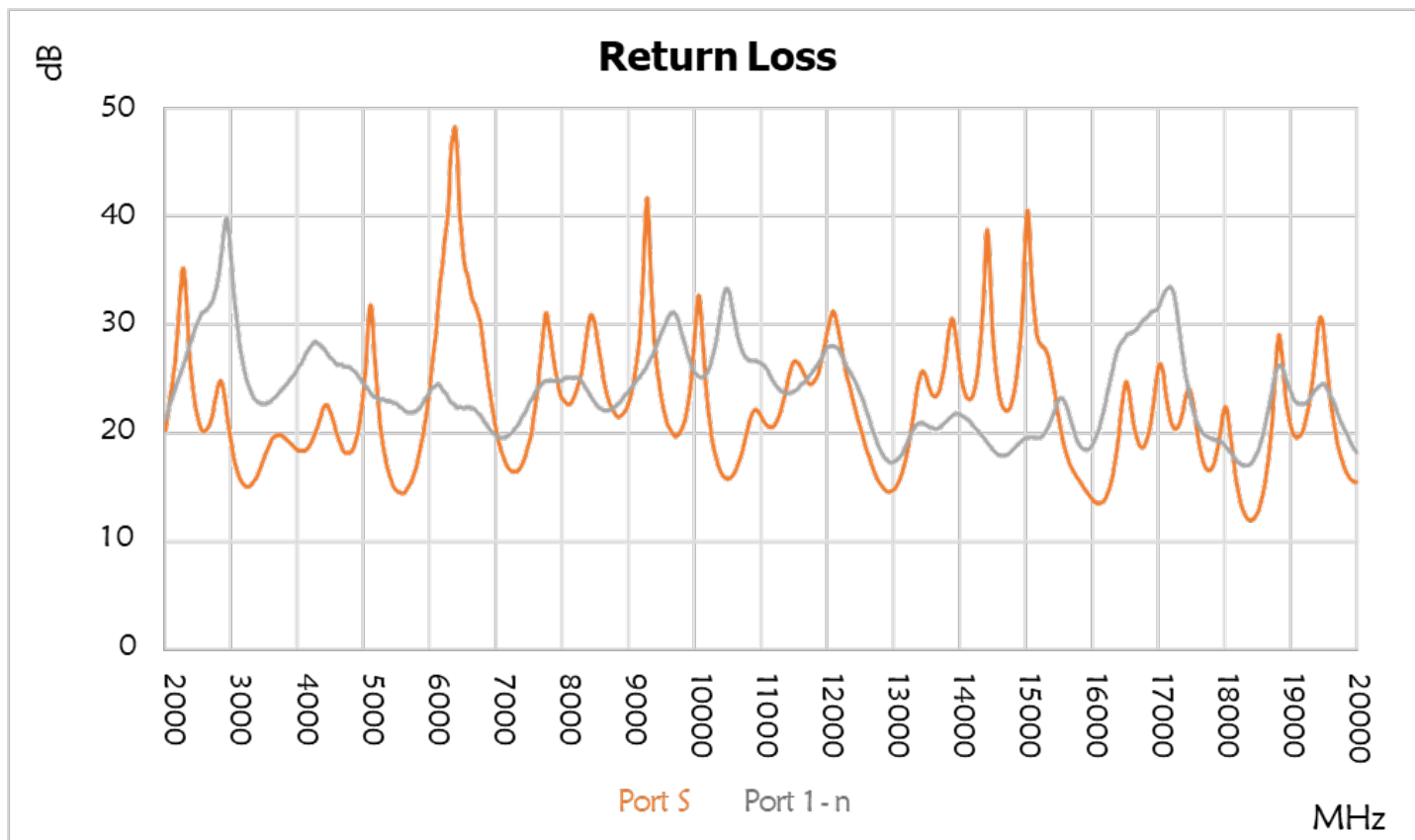
Materials

RoHS /REACH Compliant ³	Yes
Enclosure	Aluminum
Connectors	Stainless Steel
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Gray Paint

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.



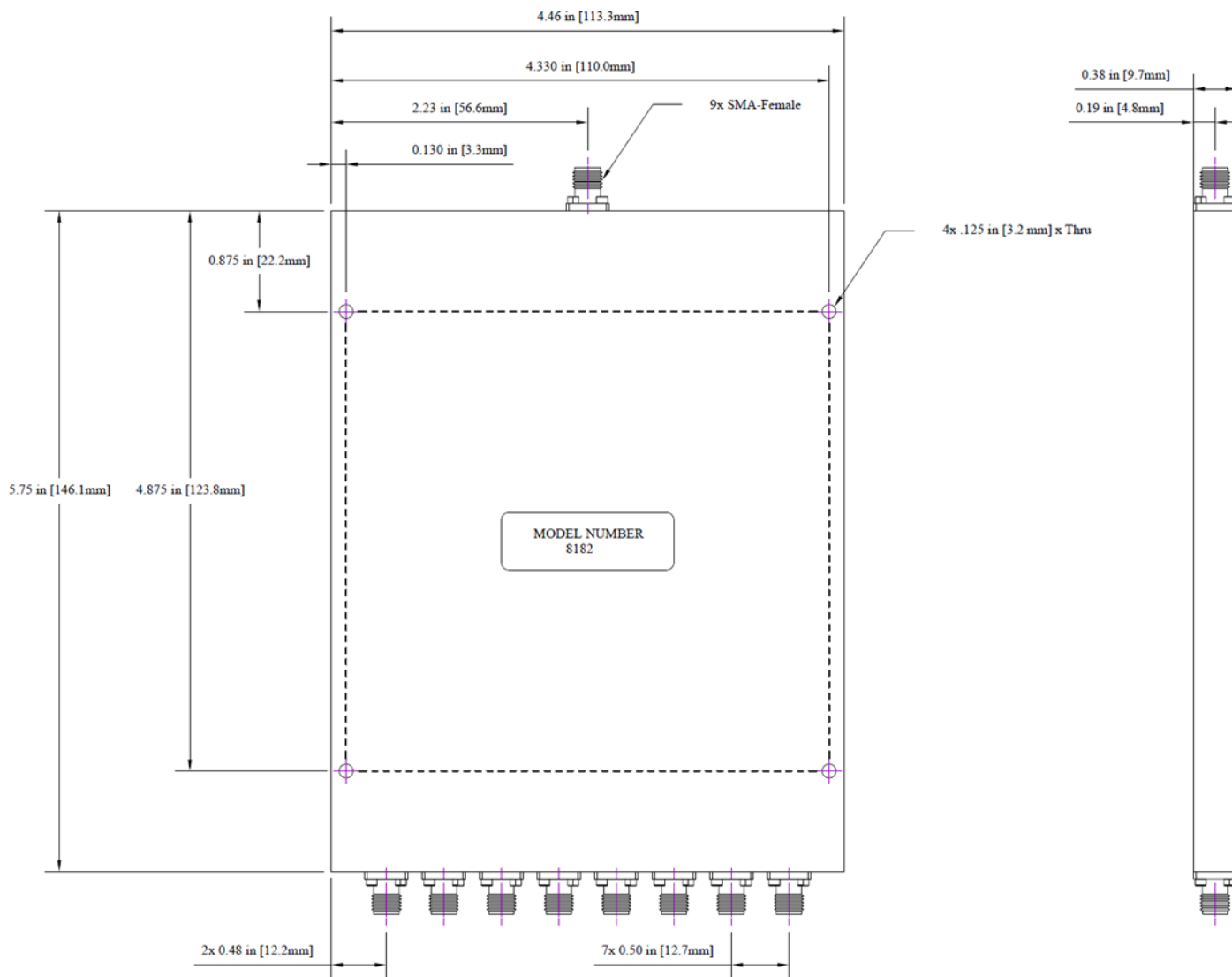
Typical Performance at +25 °C



Typical Performance Data at +25 °C

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB) 1-2
	Port 5	Port 1	Port 6	S-1	S-6	
2000	21.8	22.1	21.8	9.3	9.3	40.3
2500	20.4	31.1	20.5	9.3	9.4	20.5
3000	17.7	32.3	17.6	9.4	9.4	20.7
3500	18.5	22.8	18.6	9.4	9.4	23.2
4000	18.5	26.4	18.5	9.5	9.5	26.1
4500	21.2	26.8	21.3	9.5	9.5	24.4
5000	27.0	24.2	26.9	9.5	9.5	22.9
5500	14.6	22.5	14.6	9.7	9.7	22.6
6000	26.7	24.3	26.7	9.6	9.5	23.3
6500	34.8	22.4	34.5	9.6	9.6	29.4
7000	19.1	19.6	19.2	9.7	9.6	31.2
7500	20.2	23.2	20.2	9.7	9.7	22.2
8000	23.0	25.3	22.8	9.7	9.7	22.4
8500	28.3	22.4	28.4	9.7	9.7	23.7
9000	23.5	24.3	23.5	9.8	9.8	32.1
9500	22.0	30.0	22.1	9.8	9.8	26.8
10000	32.4	25.4	32.6	9.9	9.8	22.3
10500	15.9	32.6	15.9	10.1	10.0	24.1
11000	21.2	26.3	21.3	10.0	10.0	25.0
11500	26.7	24.0	26.9	10.0	10.0	25.9
12000	30.4	28.0	30.5	10.1	10.0	31.7
12500	19.8	23.1	19.8	10.1	10.1	31.7
13000	15.0	17.5	15.0	10.3	10.3	21.5
13500	24.4	20.7	24.3	10.2	10.1	25.6
14000	24.8	21.6	24.9	10.2	10.2	29.5
14500	26.5	18.3	26.4	10.3	10.2	44.0
15000	41.4	19.7	41.7	10.4	10.2	28.2
15500	20.1	23.4	20.0	10.4	10.4	25.6
16000	13.7	19.4	13.7	10.8	10.7	27.3
16500	24.9	29.2	24.8	10.5	10.5	26.9
17000	26.7	32.3	26.6	10.6	10.5	26.9
17500	22.6	21.8	22.6	10.7	10.6	29.6
18000	22.5	18.7	22.6	10.7	10.7	38.5
18500	13.3	18.9	13.2	10.9	10.9	26.9
19000	20.0	23.2	20.0	10.8	10.7	28.7
19500	27.3	24.3	27.3	10.8	10.8	27.8
20000	15.7	18.0	15.7	11.1	11.1	34.4

Outline Dimensions



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