

Wideband Single-Sided Power Divider 4-way SMA Female 400 MHz to 7.2 GHz

4-way SMA Power Divider 400 MHz to 7.2 GHz

Product Description

AmpliTech offers a wide selection of High-Quality RF power dividers, featuring Wilkinson design. Model APTPD-4-00400720-SMA is a 4-way power divider that operates from 400 MHz to 7.2 GHz. Get your system ready for extended WiFi with this low loss, high performance splitter. The device is RoHS compliant.

Specifications	Min	Typ	Max	Min
Frequency	400		7200	MHz
Impedance		50		Ohm
Return Loss (Port S)	10	19		dB
Return Loss (Ports 1-4)	16	24		dB
Insertion Loss (Above 6.02 dB)		1.4	1.5	dB
Isolation	16	22		dB
Amplitude Balance		0.3	0.5	dB
Phase Balance		3.5	12	Degrees
Input Power (CW) ¹			30	Watts

Mechanical

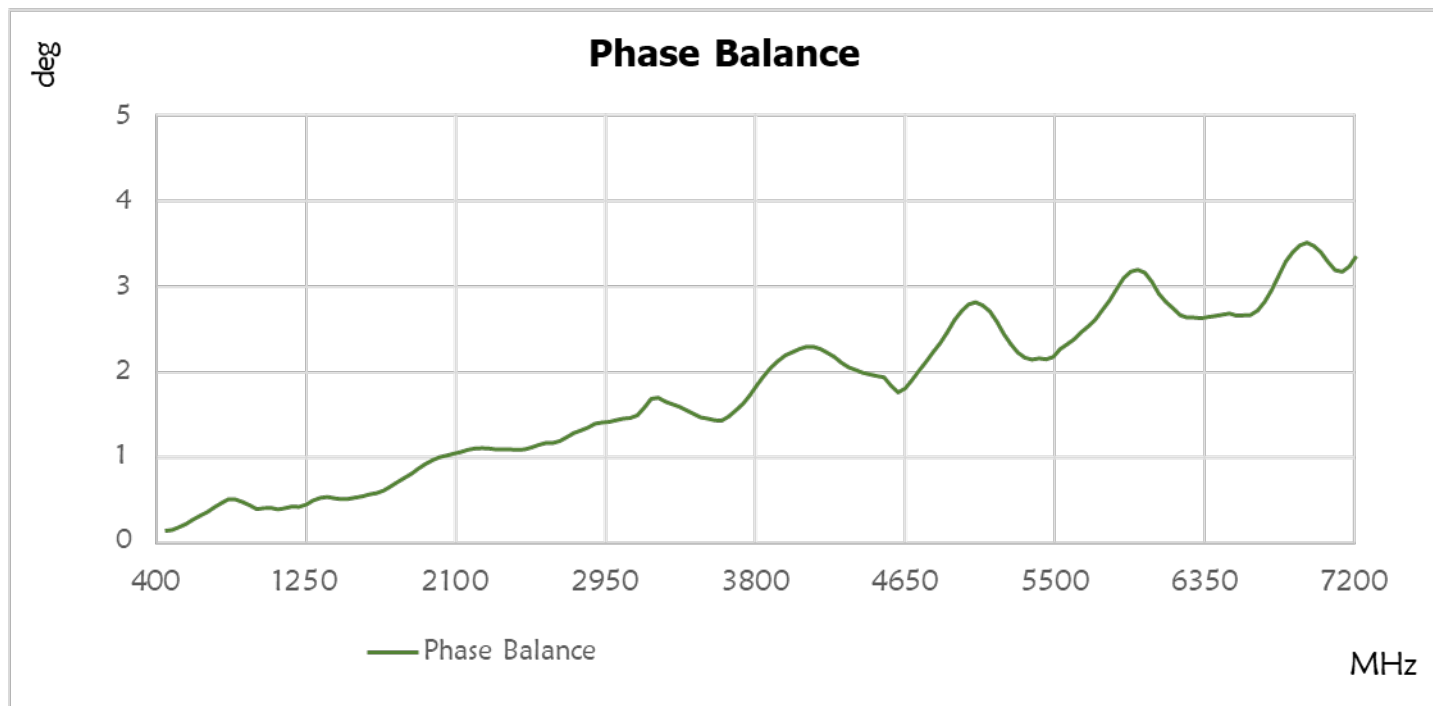
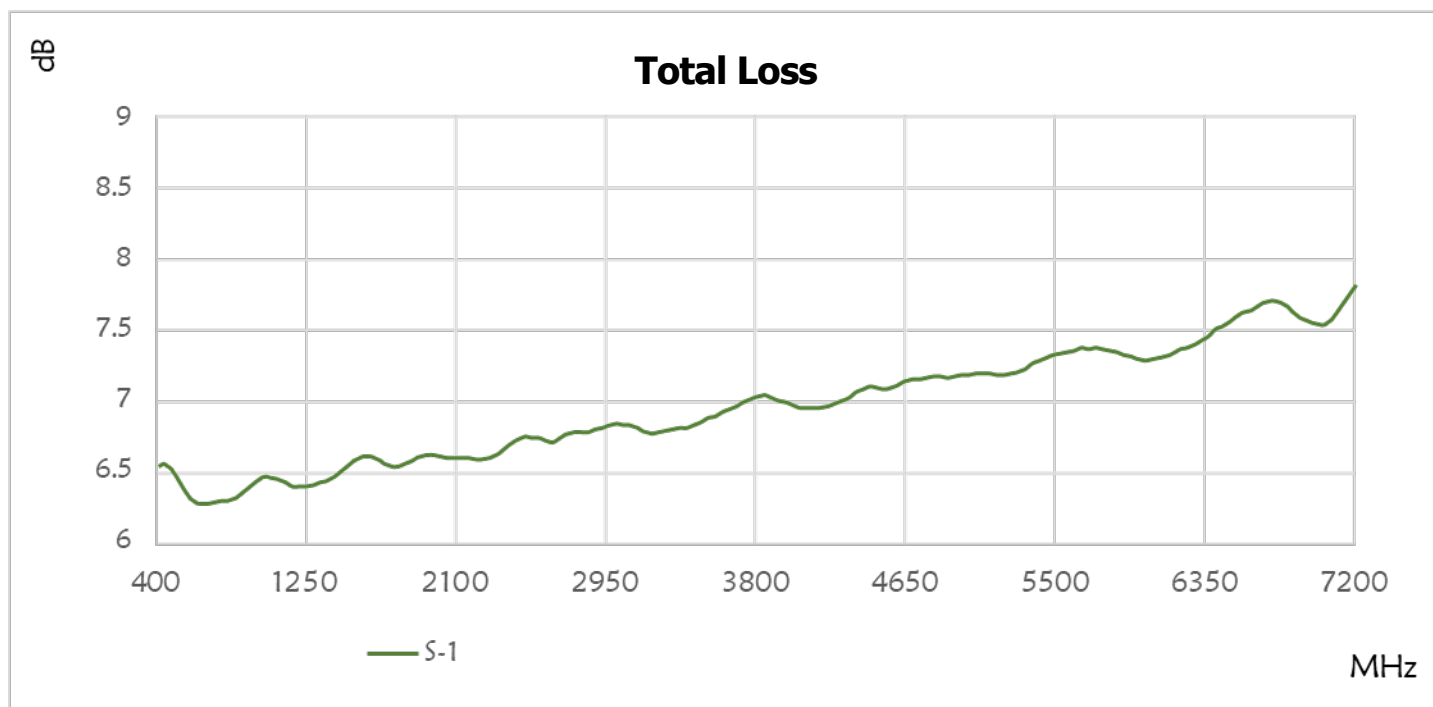
Connector Interface	SMA-Female
Operating Temperature ²	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	6 oz (170 g)
Humidity	10-90% non-condensing
Environment	Indoors Use Only

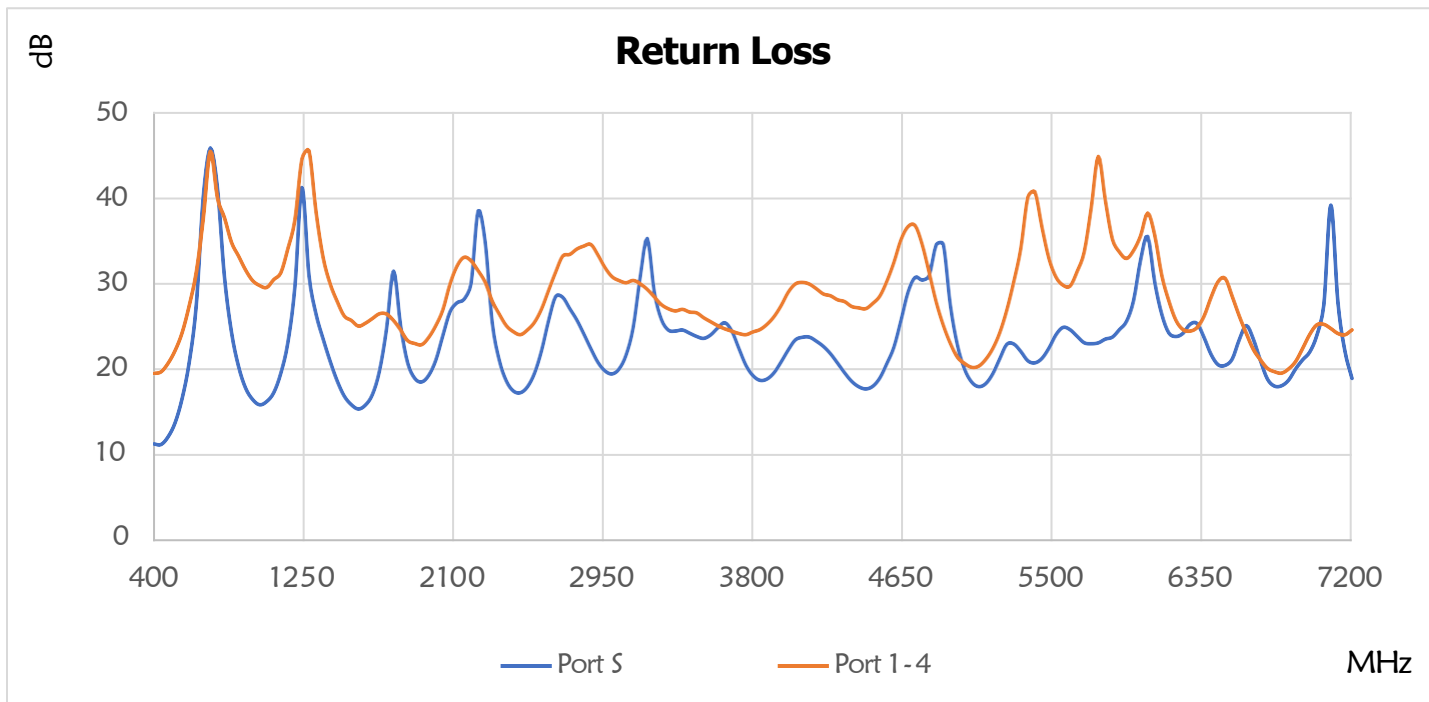
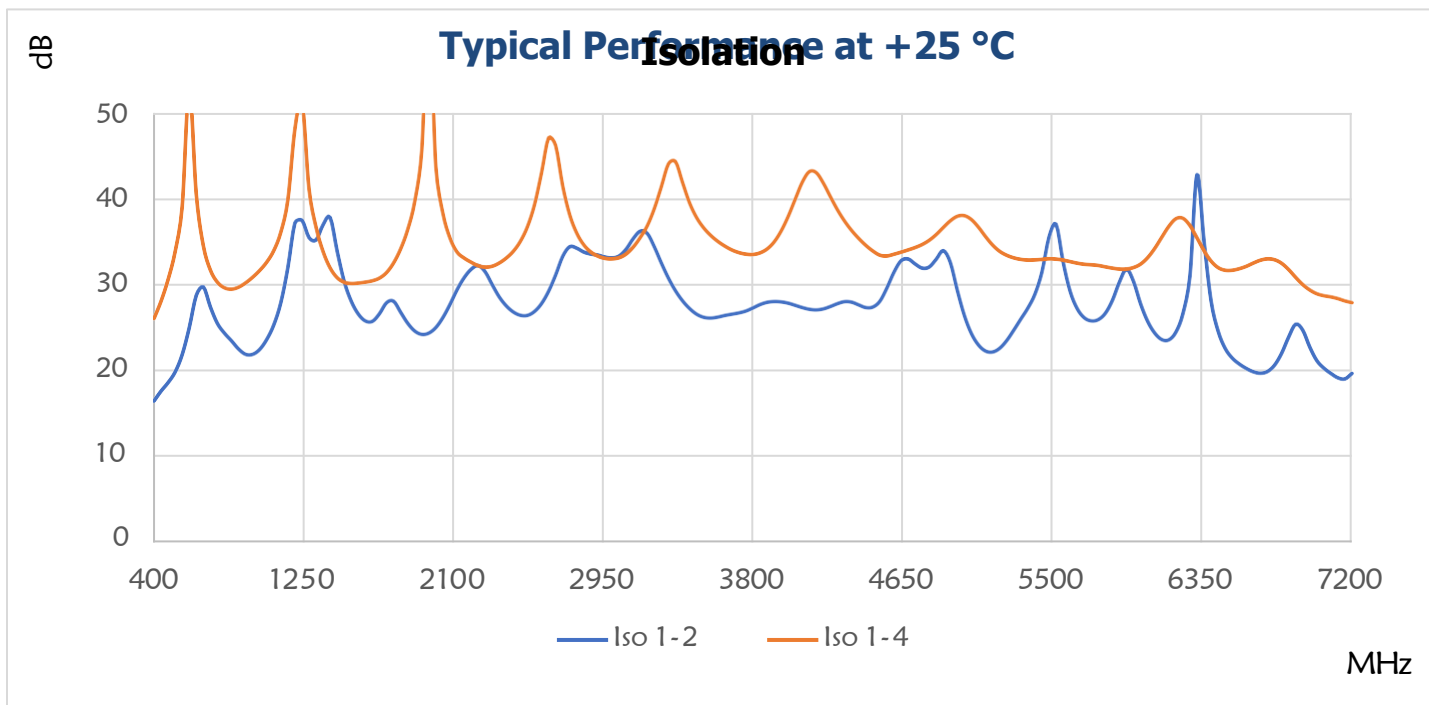
Materials

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

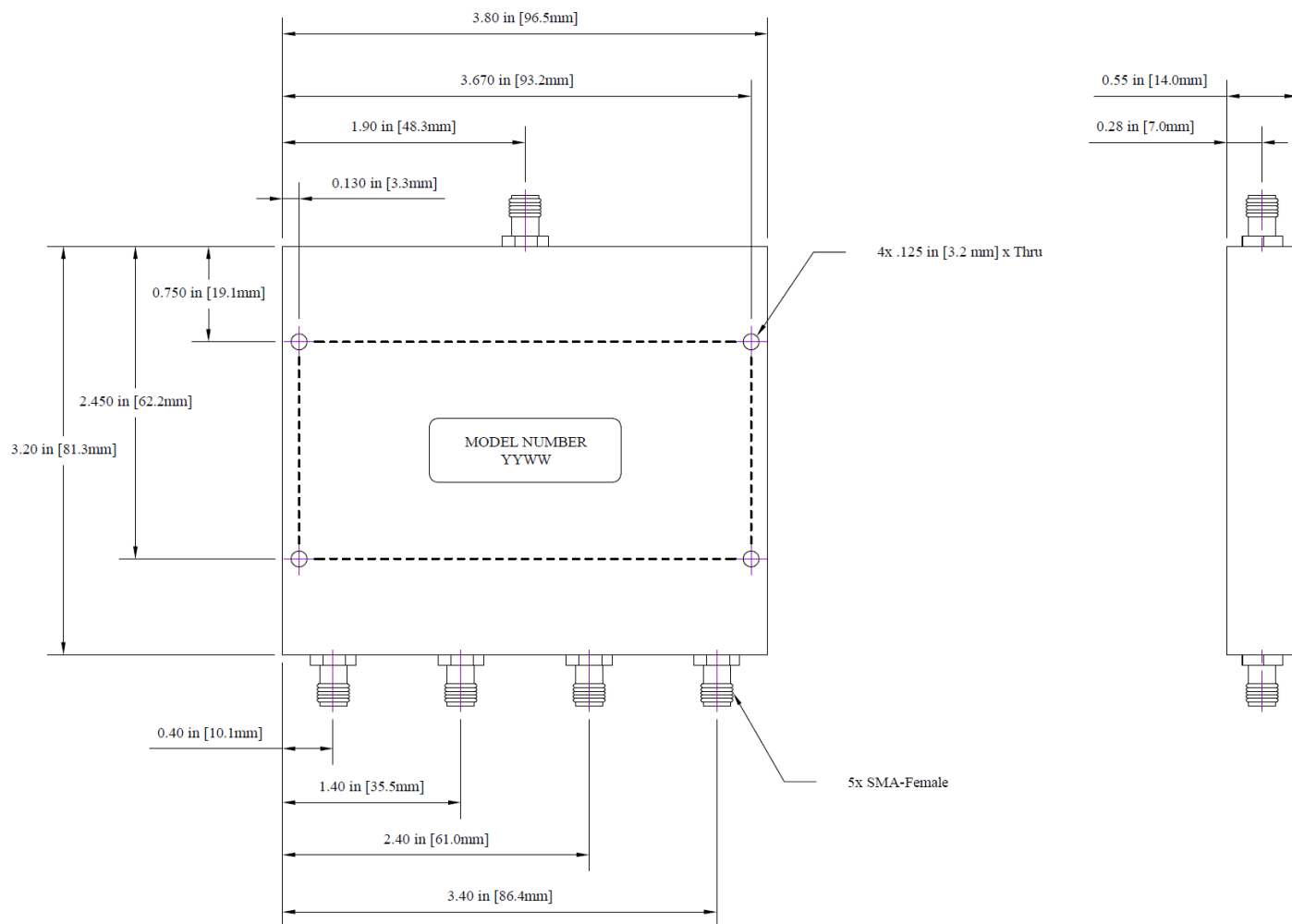




Typical Performance Data at +25 °C

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)	
	Port 5	Port 1	Port 4	S-1	S-4	1-2	1-4
400	11.5	19.7	19.6	6.56	6.59	16.6	26.2
600	21.0	27.6	28.1	6.31	6.34	25.1	53.0
800	31.0	37.9	30.5	6.32	6.36	24.5	29.8
1000	16.0	29.9	25.6	6.49	6.53	22.6	31.8
1200	29.8	37.6	35.0	6.42	6.44	37.4	48.3
1400	21.1	30.1	33.8	6.49	6.51	38.0	32.1
1600	16.0	25.5	24.2	6.63	6.65	25.9	30.5
1800	25.3	24.8	24.7	6.58	6.57	27.0	34.3
2000	21.2	25.3	26.9	6.63	6.64	25.2	43.9
2200	30.2	32.8	30.6	6.61	6.62	32.0	32.8
2400	18.8	25.3	24.1	6.72	6.73	27.7	33.3
2600	22.4	27.2	27.6	6.74	6.75	28.0	43.2
2800	25.9	34.2	35.1	6.80	6.82	34.4	36.2
3000	19.6	31.0	29.0	6.86	6.86	33.3	33.2
3200	35.4	29.5	26.8	6.79	6.80	36.1	37.0
3400	24.8	27.2	27.9	6.83	6.85	28.3	42.1
3600	25.0	25.3	25.4	6.94	6.94	26.4	35.2
3800	19.4	24.5	22.4	7.05	7.05	27.5	33.7
4000	22.4	29.2	32.8	6.99	7.01	28.0	38.1
4200	22.8	28.9	24.7	6.98	7.00	27.4	42.0
4400	18.1	27.3	20.8	7.10	7.12	27.8	35.6
4600	22.8	32.6	23.9	7.13	7.16	31.6	33.7
4800	31.1	31.4	33.4	7.19	7.17	32.2	35.3
5000	20.2	20.9	21.7	7.20	7.18	26.6	38.2
5200	21.4	24.4	20.0	7.20	7.22	22.8	34.1
5400	20.9	40.9	27.9	7.30	7.29	29.1	33.1
5600	24.8	29.9	27.7	7.37	7.38	29.4	32.9
5800	23.7	39.8	30.0	7.37	7.36	26.8	32.2
6000	32.9	35.7	27.7	7.30	7.30	27.9	32.6
6200	24.0	25.9	34.3	7.38	7.34	24.6	37.8
6200	24.0	25.9	34.3	7.38	7.34	24.6	37.8
6400	21.9	28.6	24.4	7.52	7.53	28.3	32.9
6600	25.3	24.3	23.4	7.65	7.67	20.4	32.3
6800	18.3	19.7	22.6	7.69	7.62	22.2	32.7
7000	24.1	25.4	28.9	7.55	7.51	21.3	29.1
7200	19.1	24.8	32.0	7.83	7.73	19.8	28.1

Outline Dimensions



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