

Wideband Single-Sided Power Divider 4-way SMA Female 700 MHz to 4 GHz

4-way SMA Power Divider 700 MHz to 4 GHz

Product Description

AmpliTech offers a wide selection of High-Quality RF power dividers, featuring Wilkinson design. Model APTPD-4-00700400-BNC is a 4-way power divider that operates from 700 MHz to 4 GHz with low insertion loss and excellent VSWR performance. The device is RoHS compliant.

Specifications	Min	Typ	Max	Min
Frequency	700		4000	MHz
Impedance		50		Ohm
Return Loss (Port S)	12.7	14.3		dB
Return Loss (Ports 1-4)	14.0	17.5		dB
Insertion Loss (Above 6.02 dB)		1.2	1.5	dB
Isolation	18	22		dB
Amplitude Unbalance		0.3	0.5	dB
Phase Unbalance		3	6	Degrees
Input Power (CW) ¹			30	Watts

Mechanical

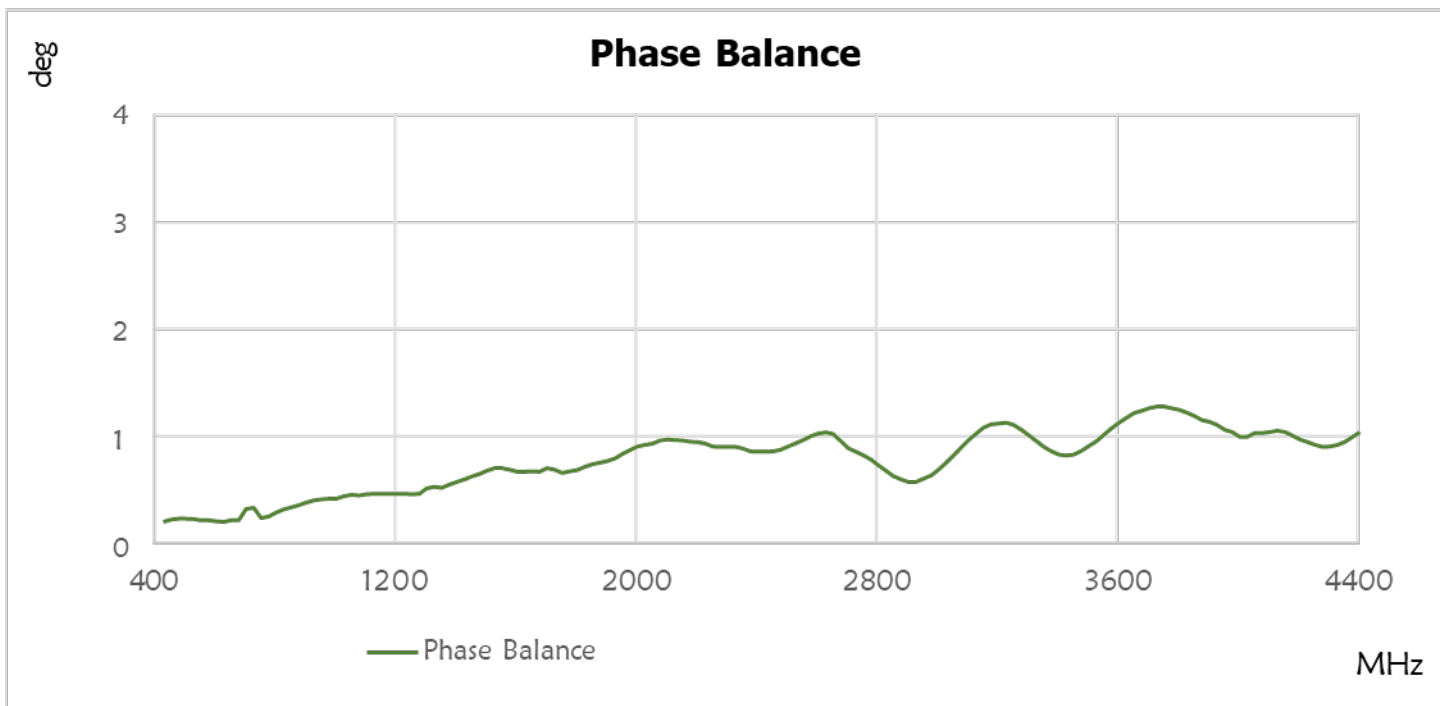
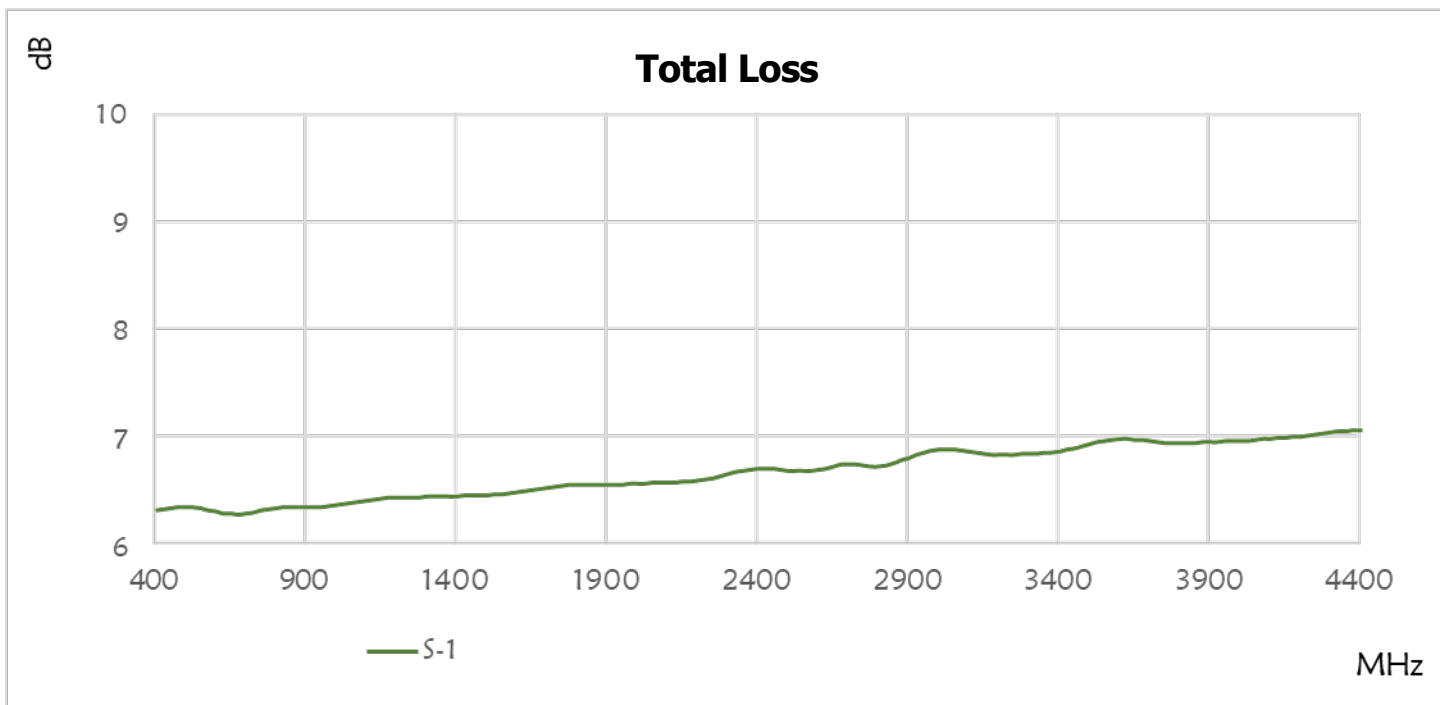
Connector Interface	BNC-Female
Operating Temperature ²	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	6 oz (170 g)
Humidity	10-90% non-condensing
Environment	Indoors Use Only

Materials

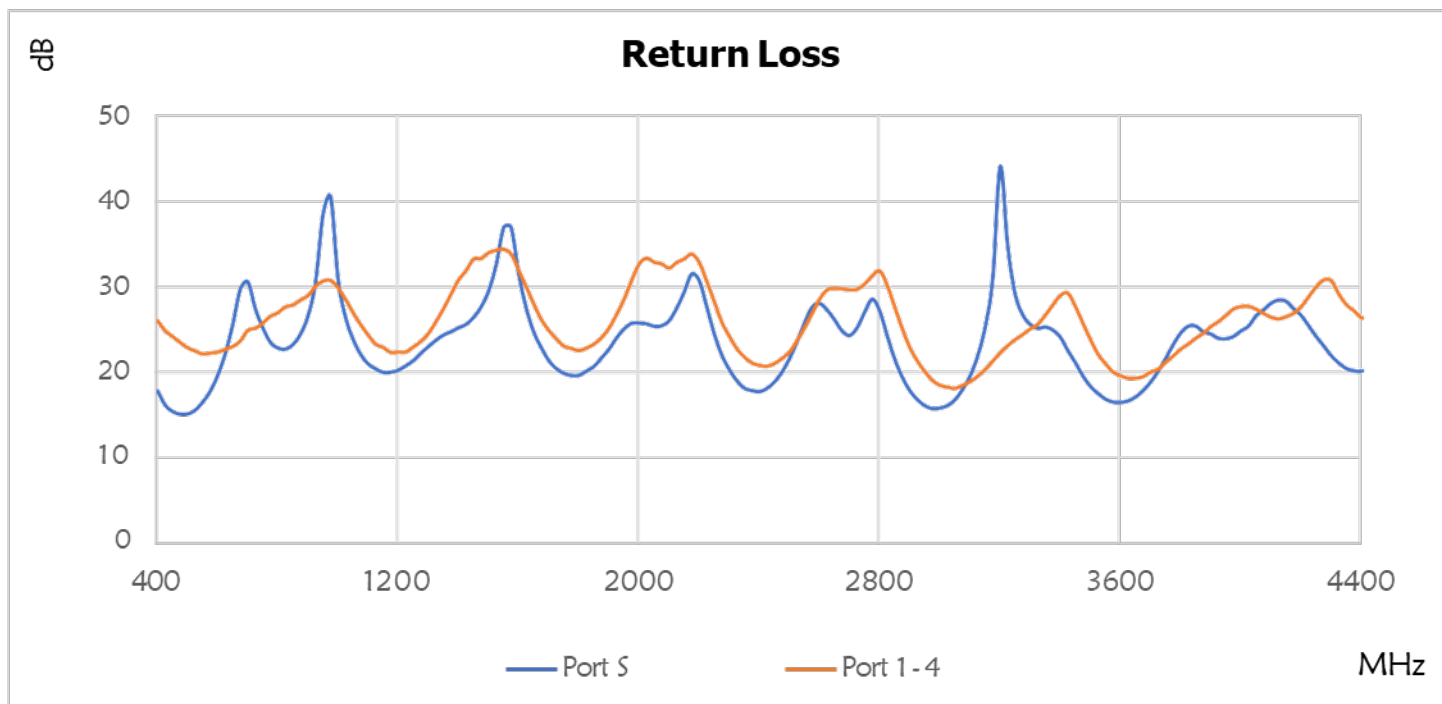
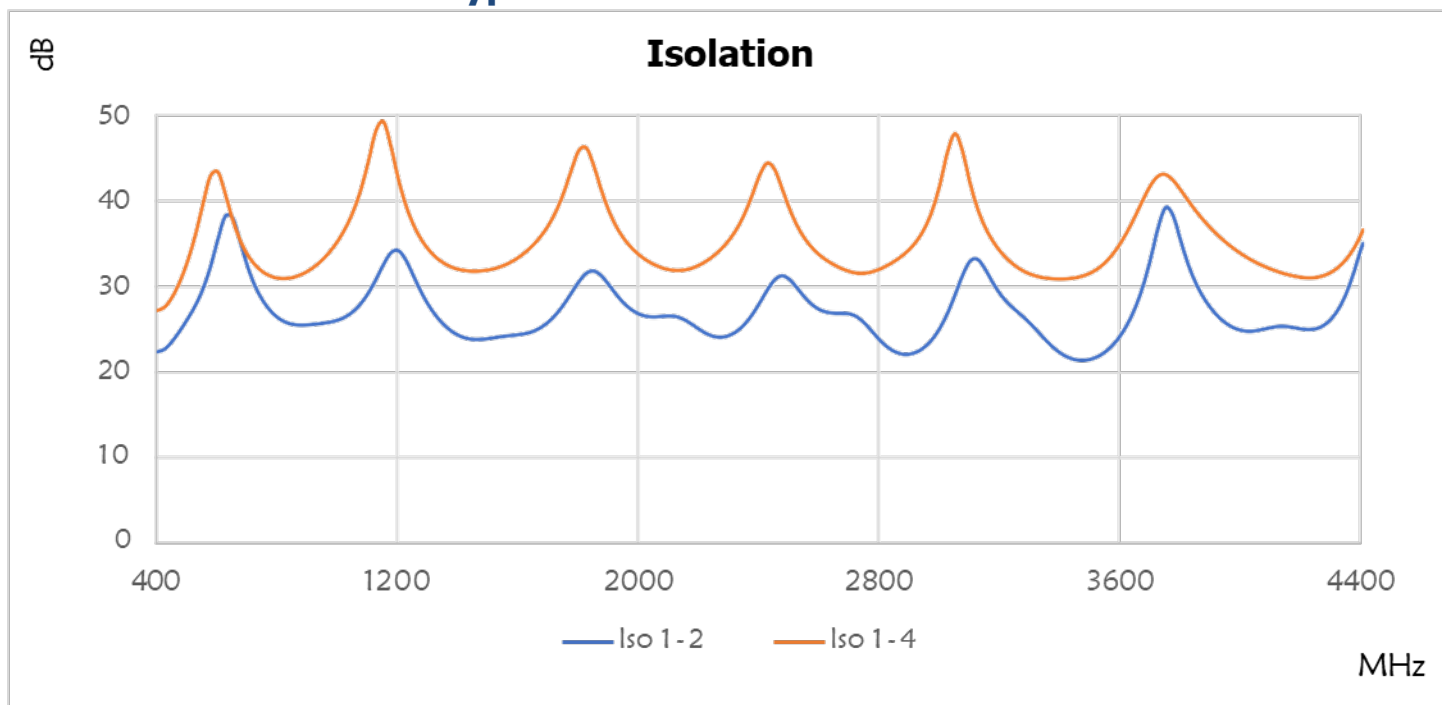
RoHS /REACH Compliant ³	Yes
Enclosure	Aluminum
Connectors	Brass, Tri-Alloy Plated
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Clear Chem Film

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



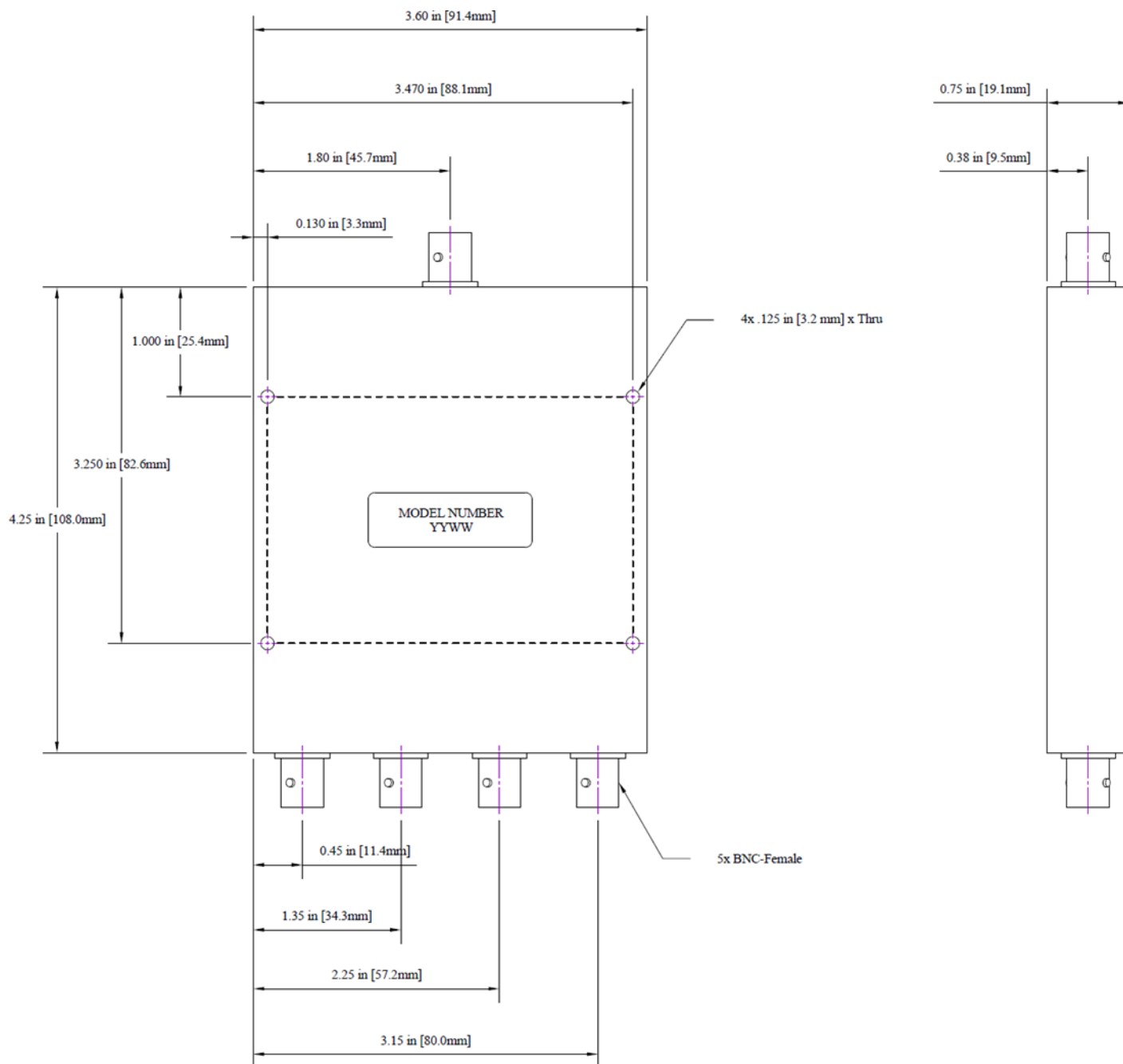
Typical Performance at +25 °C



Typical Performance Data at +25 °C

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)	
	Port 5	Port 1	Port 4	S-1	S-4	1-2	1-4
400	18.0	26.2	25.0	6.32	6.39	22.5	22.2
450	15.6	24.4	23.6	6.34	6.41	23.8	23.3
500	15.3	23.1	22.9	6.35	6.43	26.3	25.4
550	16.7	22.3	22.4	6.34	6.41	29.8	28.2
600	19.9	22.6	22.9	6.31	6.38	35.6	33.4
650	25.8	23.2	23.7	6.29	6.35	38.1	39.3
700	30.8	25.1	25.8	6.29	6.35	32.3	34.5
750	25.4	26.0	26.9	6.32	6.38	28.4	29.6
800	23.0	27.2	28.5	6.34	6.39	26.4	27.2
850	23.5	28.1	29.9	6.35	6.40	25.7	26.1
900	26.8	29.2	31.6	6.35	6.41	25.6	25.9
950	38.7	30.9	34.0	6.35	6.41	25.8	25.8
1000	31.0	30.1	32.3	6.37	6.43	26.2	26.0
1250	21.6	23.2	23.1	6.44	6.50	31.4	32.7
1500	29.7	34.2	33.3	6.46	6.52	24.0	24.4
1750	20.1	23.3	24.9	6.55	6.61	28.0	28.4
2000	26.0	32.8	31.8	6.57	6.62	26.9	28.0
2250	24.7	28.4	33.0	6.62	6.70	24.3	24.7
2500	21.8	22.6	23.4	6.69	6.76	30.9	32.5
2750	27.3	30.5	32.3	6.74	6.82	25.8	26.1
3000	16.0	18.7	19.9	6.89	6.90	25.3	25.3
3250	29.3	24.0	24.3	6.84	6.89	27.4	27.8
3500	18.5	24.0	24.6	6.94	6.96	21.6	21.5
3750	21.8	21.4	20.7	6.95	7.02	39.3	39.5
4000	25.0	27.9	26.8	6.97	7.02	25.0	24.6
4250	24.4	30.2	28.8	7.03	7.10	25.2	24.5
4500	25.4	27.5	24.7	7.07	7.17	34.9	37.2

Outline Dimensions



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