

Power Divider, 0.7-4 GHz, 16-way, BNC Female

ESAT-16PD00704B

Description

ESAT-16PD00704B is a 16-way in-line Wilkinson Power Divider covering 700 MHz to 4 GHz. The unique, Esatcom-exclusive circuit with custom-designed connectors ensures a smooth roll-down beyond 4 GHz to account for frequency drifting near the band edge. Aluminum enclosure measures 14.5" wide x 4.75" deep x 0.75" high, allowing for mounting into a 19" rack. BNC connectors make for quick and easy, yet reliable connections.

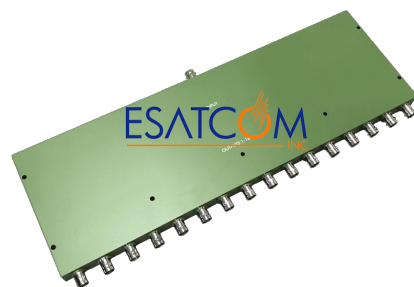


Photo is representative.

Specification	Min.	Typ.	Max.	Units
Frequency	700	--	4000	MHz
Impedance	--	50	--	Ohm
Return Loss (Port S)	11	15	--	dB
Return Loss (Port 1-16)	13	17	--	dB
Insertion Loss (above 12.04 dB)	--	2.5	3.5	dB
Isolation	16	22	--	dB
Amplitude Balance	--	0.3	1.0	dB
Phase Balance	--	12	--	Degrees
Input Power (CW) ¹	--	--	30	Watts

Mechanical

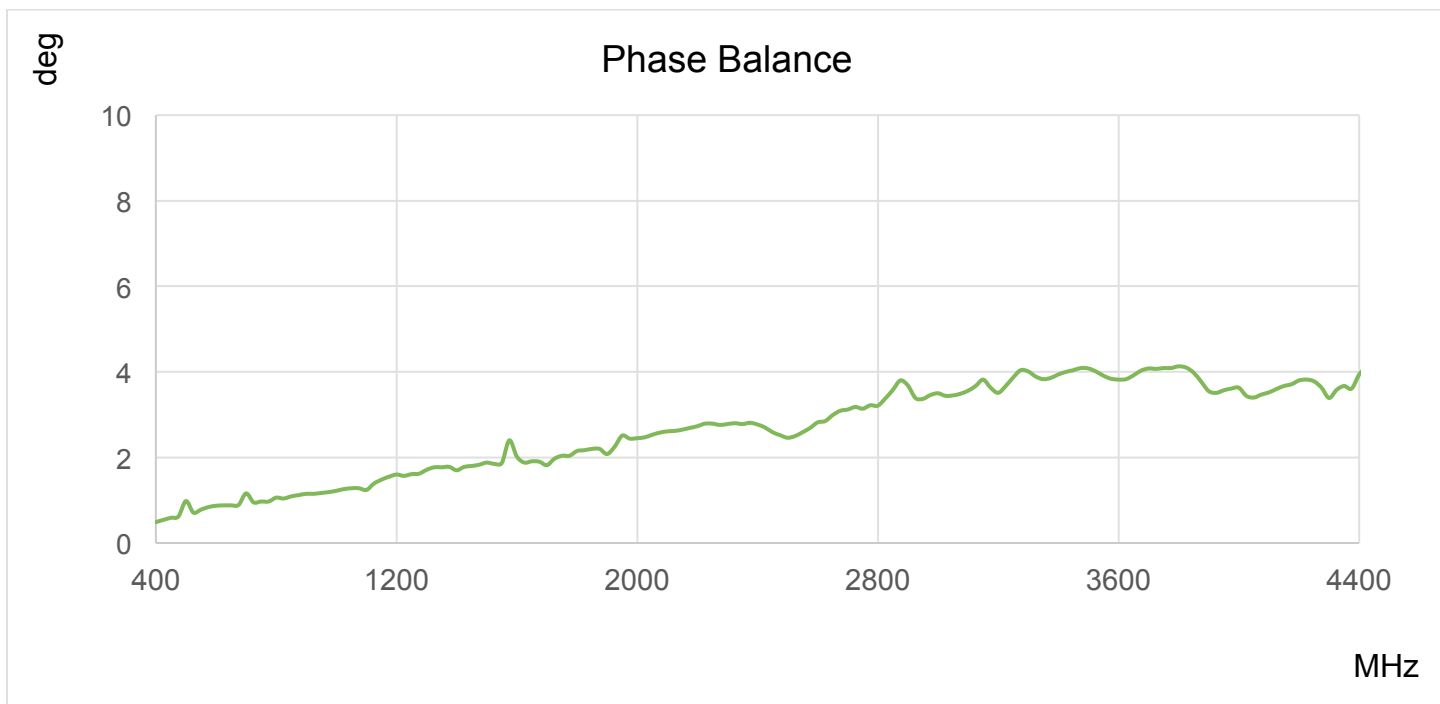
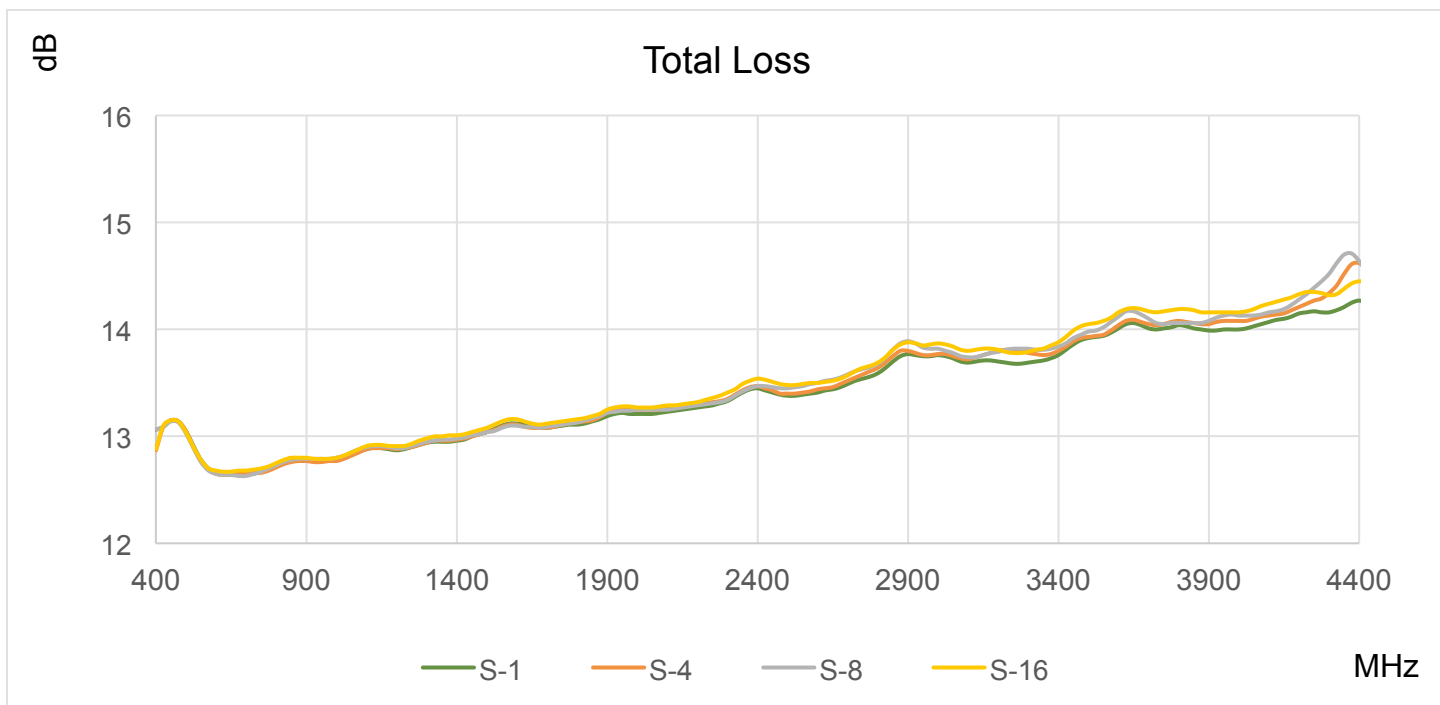
Connector Interface	BNC-Female
Operating Temperature ²	-10 to +65 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	3.6 lb. (1.63 kg)
Humidity	10-90% non-condensing
Environment	Indoors Use Only
CAGE Code	87MG8

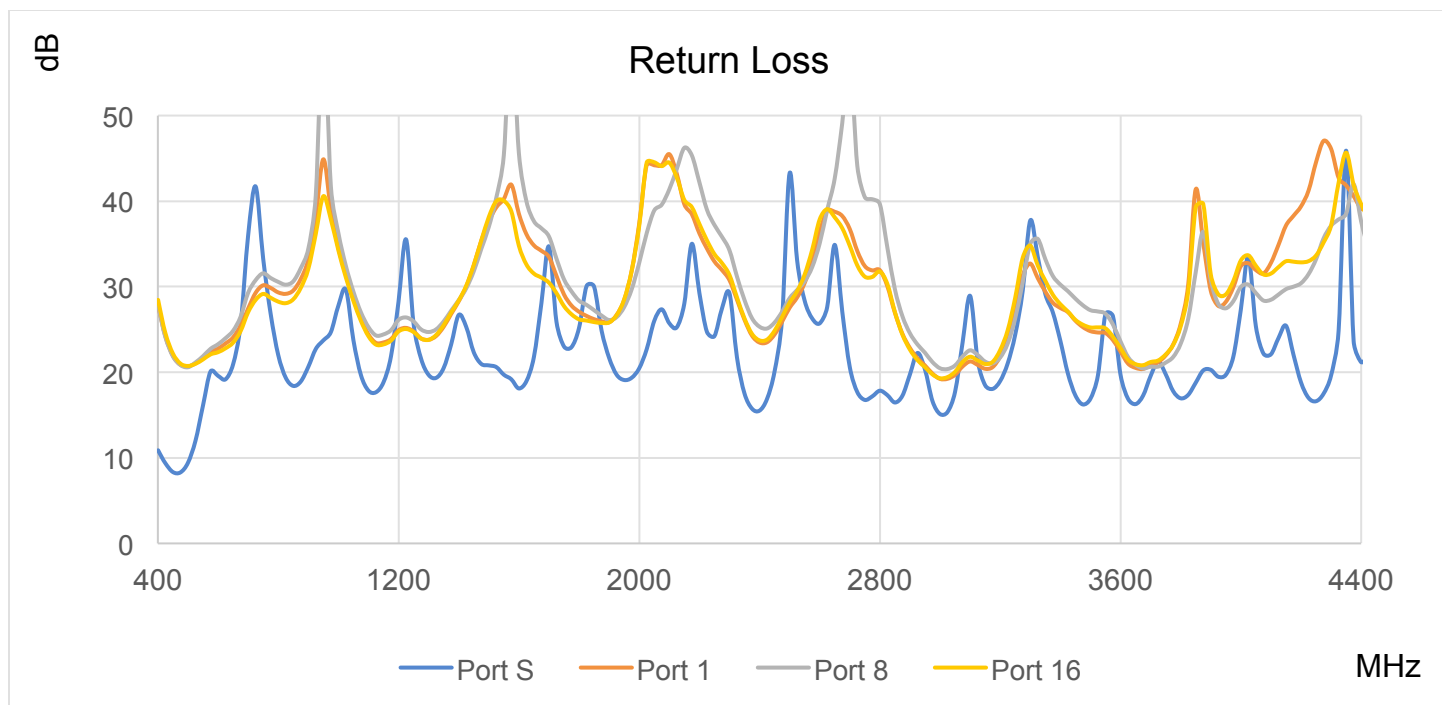
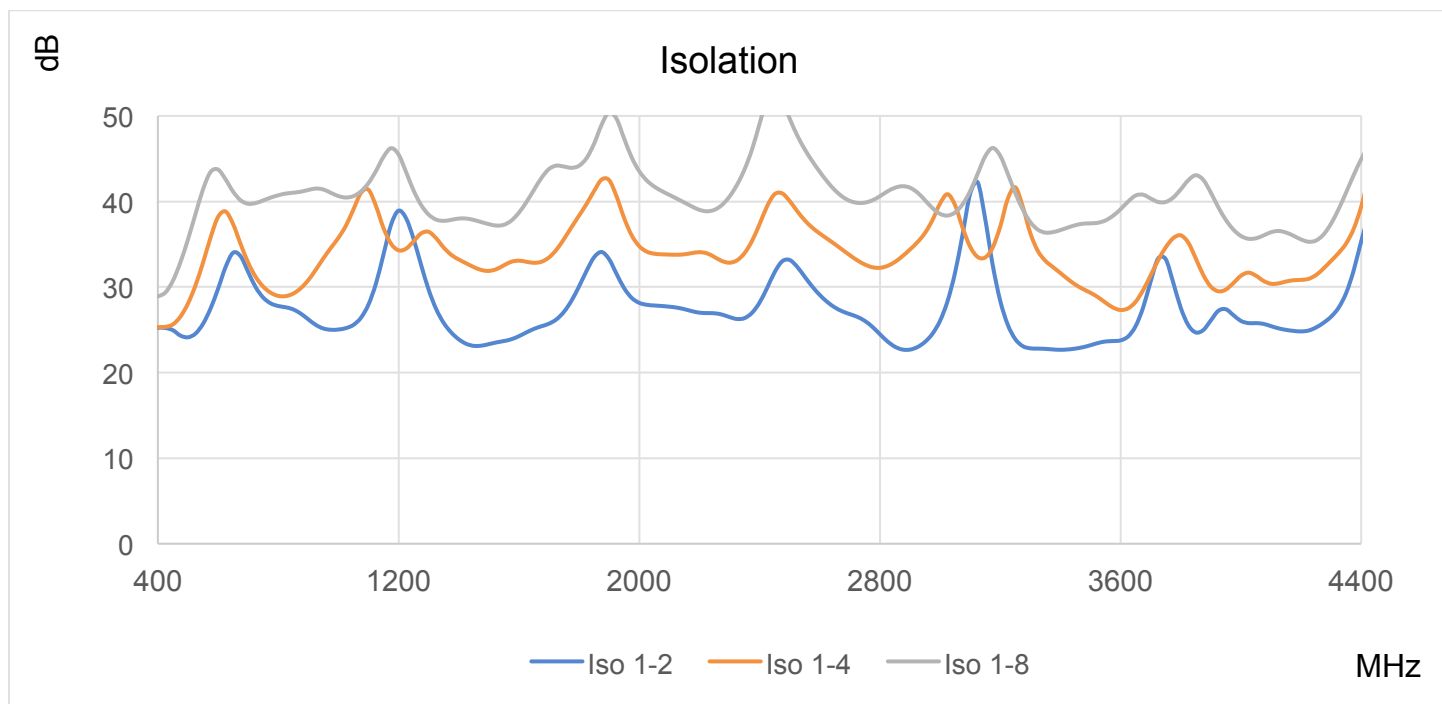
Materials

RoHS Compliant ³	Yes
REACH Compliant ³	Yes
Enclosure	Aluminum
Connectors	Brass, Tri-Alloy Plating
Contacts	Be Cu, Gold Plating
Insulators	PTFE
Finish	Green Paint

1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
2. Electrical specification at +25 °C only.
3. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C

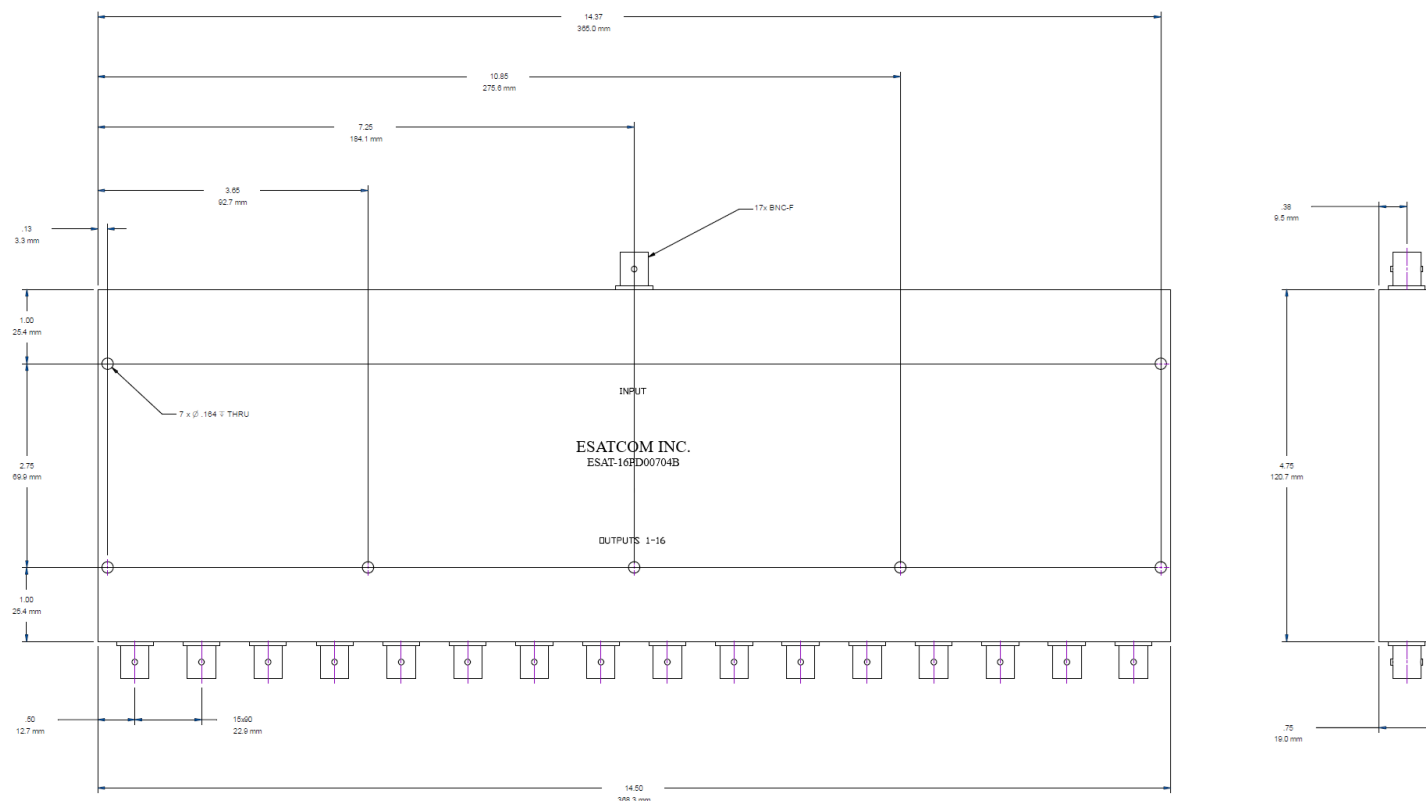




Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)			Isolation (dB)		
	Port S	Port 1	Port 16	S-1	S-8	S-16	1-2	1-4	1-8
400	10.88	27.86	28.47	13.06	13.06	12.88	25.27	25.32	28.89
500	9.42	20.68	20.74	13.05	13.03	13.04	24.13	28.07	35.56
600	19.59	22.77	22.35	12.67	12.65	12.68	29.79	38.20	43.74
700	35.97	27.44	27.02	12.64	12.63	12.68	31.78	32.87	39.74
800	22.04	29.34	28.26	12.72	12.73	12.75	27.79	28.97	40.73
900	20.63	33.19	32.07	12.77	12.79	12.80	26.23	30.81	41.35
1000	27.78	34.58	34.27	12.78	12.80	12.80	25.04	35.75	40.64
1250	25.69	24.78	24.71	12.90	12.91	12.93	35.64	35.34	41.29
1500	20.81	37.65	38.14	13.04	13.04	13.08	23.33	31.89	37.36
1750	23.02	29.10	27.74	13.10	13.11	13.14	27.11	35.62	44.09
2000	20.46	37.35	37.09	13.21	13.25	13.27	28.16	34.79	43.55
2250	24.22	32.96	33.82	13.29	13.31	13.36	26.94	33.52	39.03
2500	43.27	27.54	28.15	13.38	13.45	13.48	33.17	40.07	49.72
2750	16.77	32.42	31.18	13.54	13.63	13.64	26.05	32.64	39.87
3000	15.12	19.23	19.30	13.76	13.82	13.87	26.05	39.76	38.56
3250	24.40	27.40	28.72	13.68	13.82	13.78	23.93	41.67	41.02
3500	16.91	24.81	25.24	13.92	13.98	14.05	23.20	29.34	37.45
3750	19.79	21.97	22.08	14.01	14.05	14.17	33.28	34.63	39.95
4000	27.33	32.41	33.07	14.00	14.13	14.16	26.05	31.32	35.98
4250	16.62	44.56	33.65	14.17	14.39	14.35	25.28	31.41	35.44
4500	24.18	35.33	42.08	14.22	14.43	14.39	37.91	46.28	48.36

Outline Dimensions



Outline drawing: OL-16047

Dimensions are in inches, [mm] shown for convenience.

Tolerances on 2-pl decimals: $\pm .03$. 3-pl decimals: $\pm .015$.

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