

Power Divider, 8-way, 0.7 - 4 GHz, BNC Female

ESAT-8PD00704B

Description

Photo is representative.

ESAT-8PD00704B is an 8-way in-line Wilkinson Power Divider covering 700 MHz to 4 GHz. The unique circuit structure ensures a smooth roll-down beyond 4 GHz to account for frequency drifting near the band edge. Aluminum enclosure measures 7.3" wide x 4.35" deep x 0.75" high, allowing two units to be placed side-by-side in a 19" rack.

Specification	Min.	Typ.	Max.	Units
Frequency	700	--	4000	MHz
Impedance	--	50	--	Ohm
Return Loss (Port S)	12	15	--	dB
Return Loss (Port 1-8)	14	20	--	dB
Insertion Loss (above 9.03dB)	--	1.5	2.0	dB
Isolation	17	22	--	dB
Amplitude Balance	--	0.3	0.8	dB
Phase Balance	--	6	12	Deg
Input Power (CW) ¹	--	--	30	Watts

Mechanical

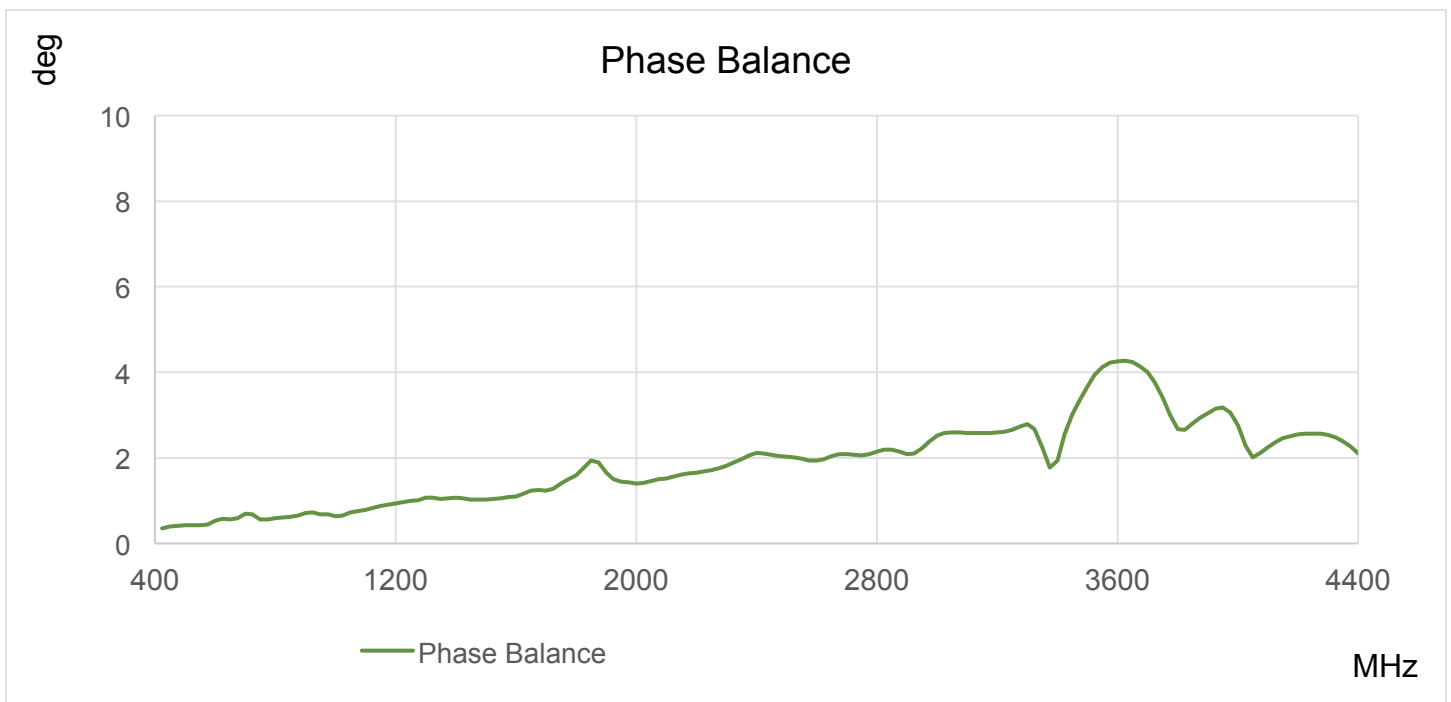
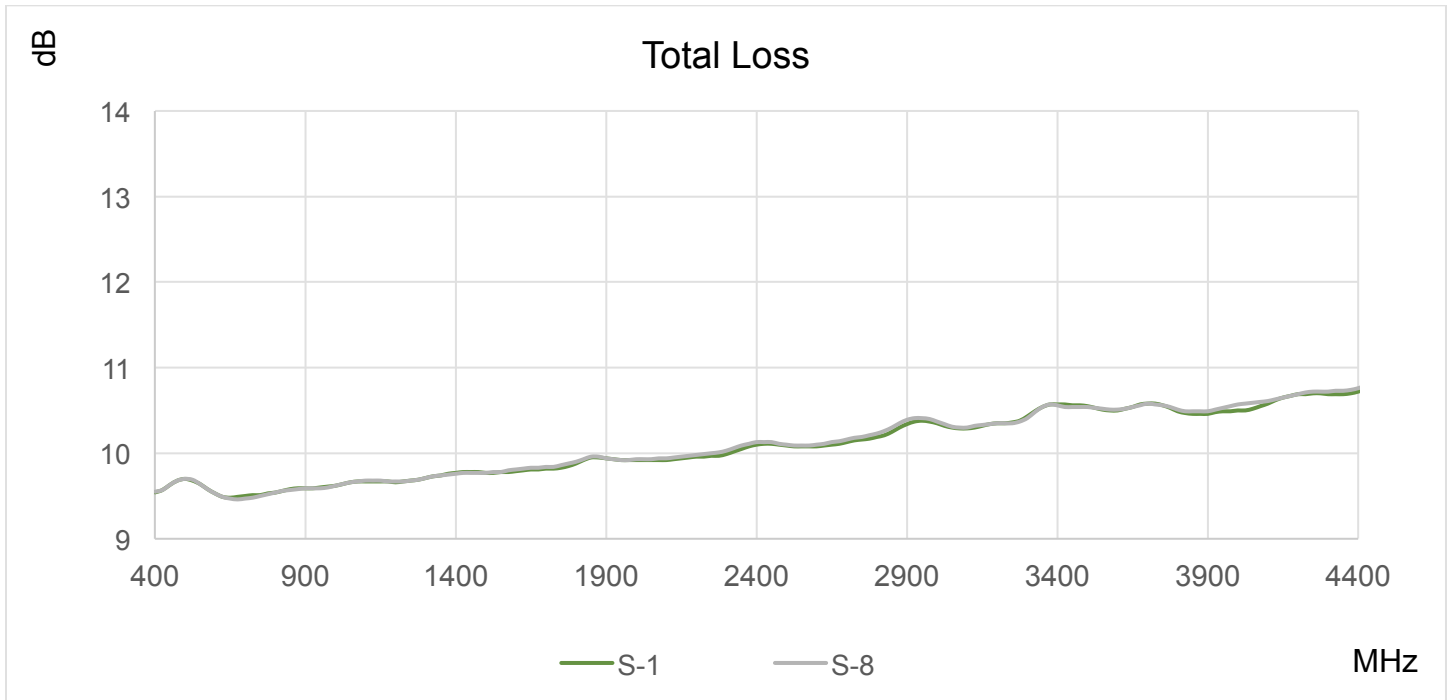
Connector Interface	BNC-Female
Operating Temperature ²	-40 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	13 oz (370 g)
Humidity	10-90% non-condensing
Environment	Indoors Use Only
CAGE Code	87MG8

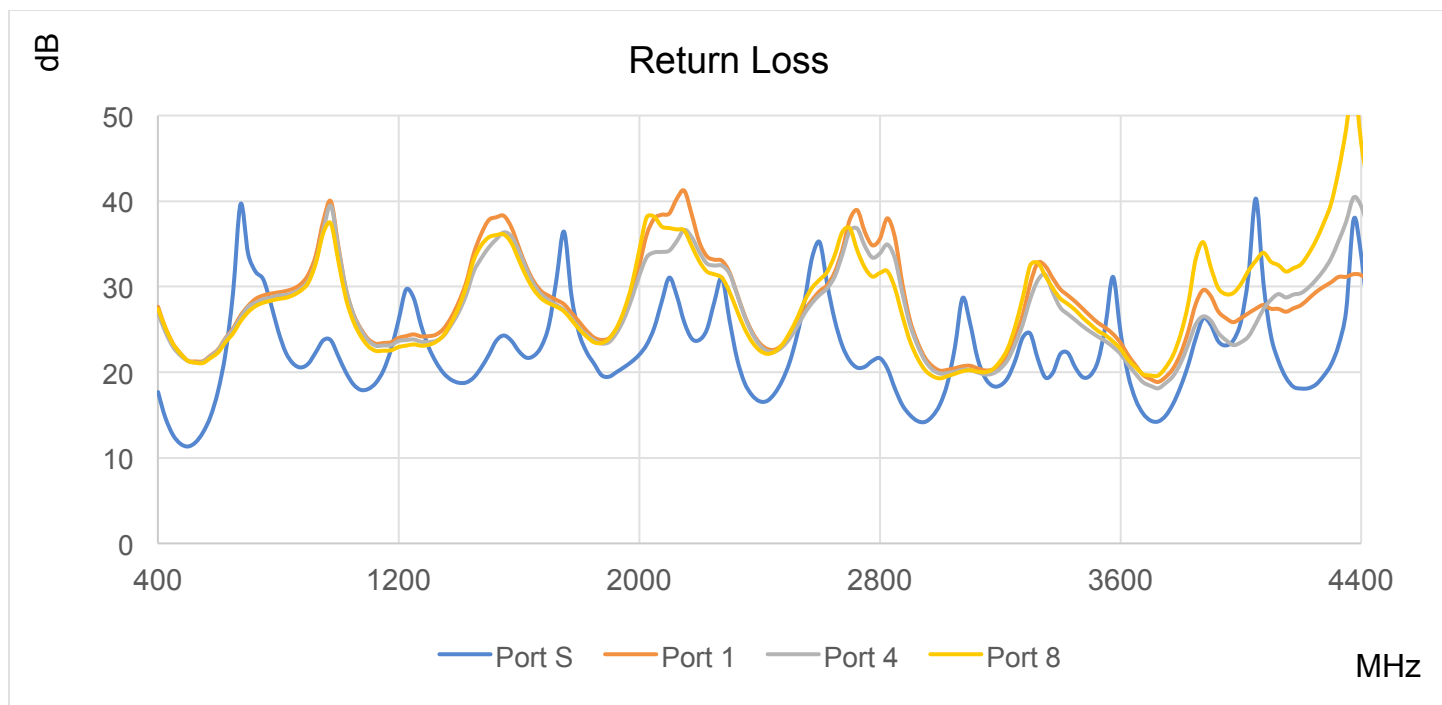
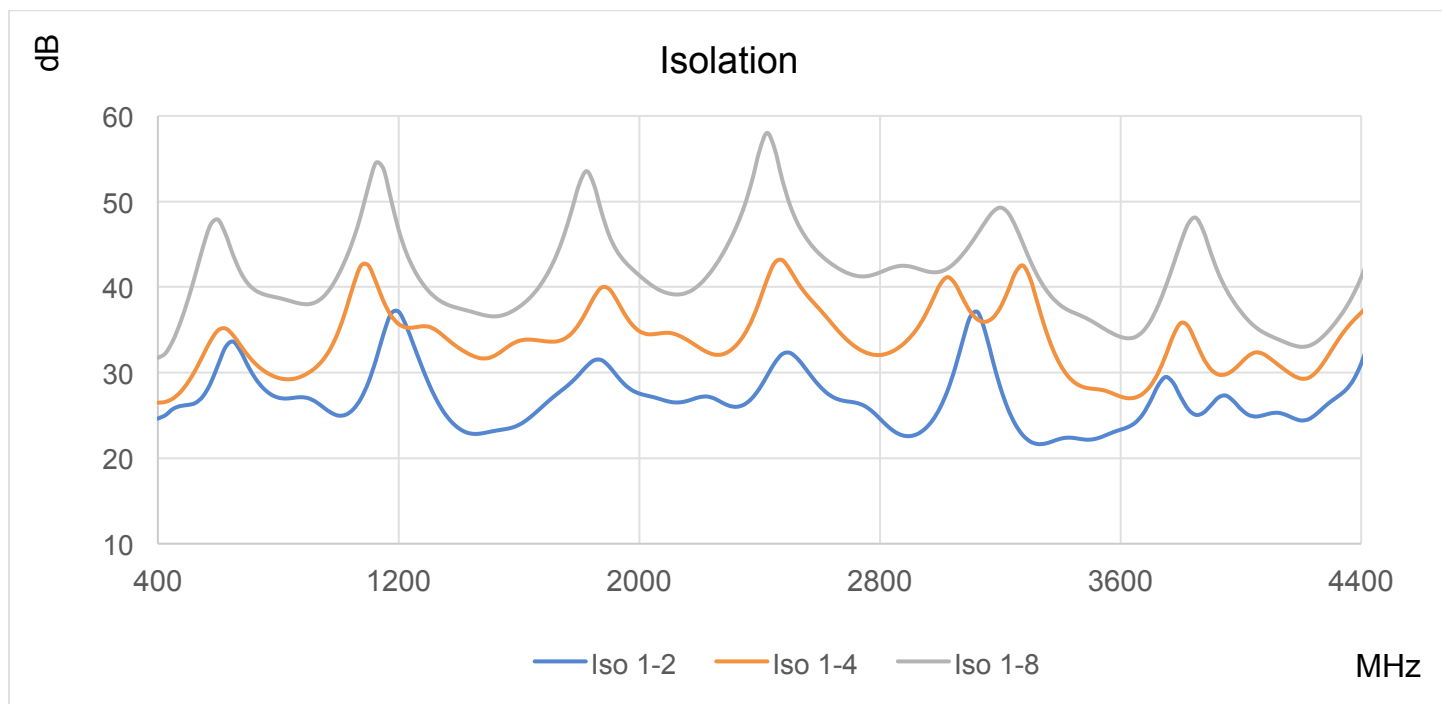
Materials

RoHS Compliant ³	Yes
REACH Compliant	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.
3. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C

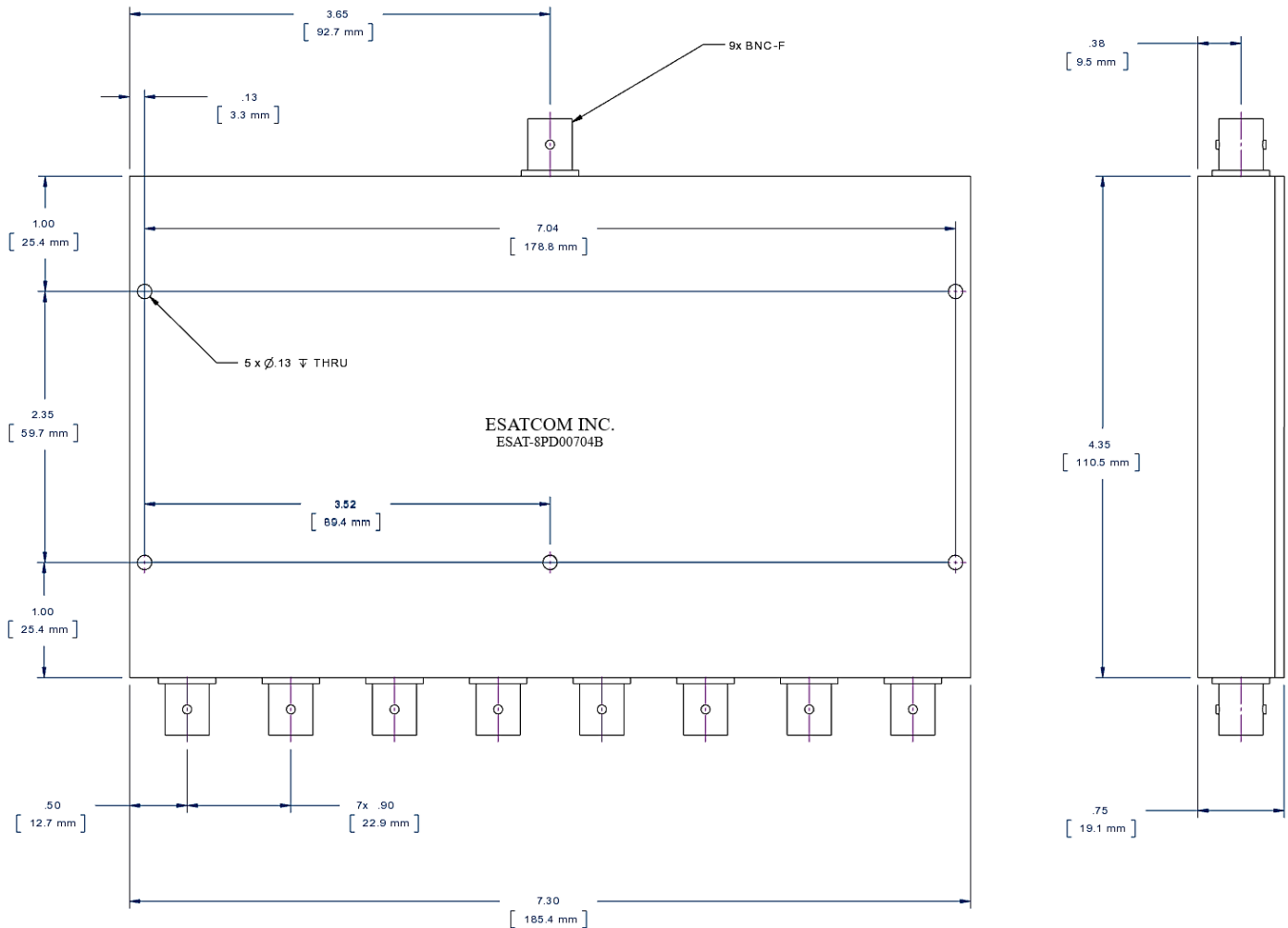




Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)			Isolation (dB)		
	Port S	Port 1	Port 8	S-1	S-4	S-8	1-2	1-4	1-8
400	17.66	27.64	27.42	9.54	9.55	9.55	24.66	26.47	31.72
500	11.33	21.35	21.34	9.70	9.72	9.70	26.22	28.86	38.51
600	17.80	22.67	22.31	9.53	9.55	9.53	30.89	34.94	47.88
700	33.86	27.76	27.04	9.50	9.49	9.47	30.76	31.99	40.38
800	24.84	29.34	28.57	9.54	9.55	9.54	27.08	29.39	38.75
900	21.01	31.42	30.47	9.59	9.61	9.59	27.01	29.97	38.00
1000	21.87	34.73	33.01	9.62	9.64	9.62	24.98	34.80	41.43
1250	28.71	24.43	23.26	9.68	9.71	9.68	33.24	35.27	42.14
1500	22.03	37.79	35.78	9.77	9.79	9.77	23.06	31.72	36.62
1750	36.44	27.96	27.13	9.83	9.85	9.86	28.14	33.93	46.06
2000	22.05	32.46	34.21	9.92	9.96	9.93	27.56	34.86	41.38
2250	28.24	33.16	31.45	9.97	9.99	10.00	26.97	32.11	42.35
2500	21.16	24.17	24.60	10.09	10.12	10.10	32.32	42.08	49.71
2750	20.65	36.42	32.24	10.16	10.22	10.19	26.09	32.40	41.25
3000	16.25	20.19	19.29	10.35	10.37	10.37	25.88	40.29	41.80
3250	21.37	24.06	25.37	10.36	10.51	10.35	23.98	41.63	47.18
3500	19.65	26.57	25.60	10.55	10.61	10.54	22.17	28.14	36.10
3750	14.92	19.45	20.56	10.56	10.96	10.56	29.49	32.00	40.05
4000	25.88	26.33	30.30	10.50	10.96	10.57	25.75	31.13	37.13
4250	18.58	29.38	35.43	10.70	10.80	10.72	25.13	30.05	33.55
4500	21.72	29.00	38.58	10.82	10.89	10.84	37.13	40.49	46.94

Outline Dimensions



Outline drawing: OL-8047

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

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

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