

Power Divider, 8-way, 20-3000 MHz, SMP Male

ESAT-8PD203000MSMP

Description

The model is an 8-way splitter covering the band 20MHz to 3GHz in one unit. Enclosure is a rugged aluminum housing. The recessed cover design minimizes RF leakage. Designed, assembled and tested in the USA. SMP connectors with slim enclosure allow compact stacking of many splitters into an integrated assembly.

Specifications	Min.	Typ.	Max.	Units
Frequency	20	--	3000	MHz
Impedance	--	50	--	Ohm
Return Loss (Port S)	9.5	13.4	--	dB
Return Loss (Port 1-8)	9.5	13.7	--	dB
Insertion Loss (above 9.03dB)	--	4.1	5.7	dB
Isolation	14.0	19.3	--	dB
Amplitude Balance ($\pm$)	--	0.45	0.80	dB
Input Power (CW) ¹	--	--	1	W

Mechanical

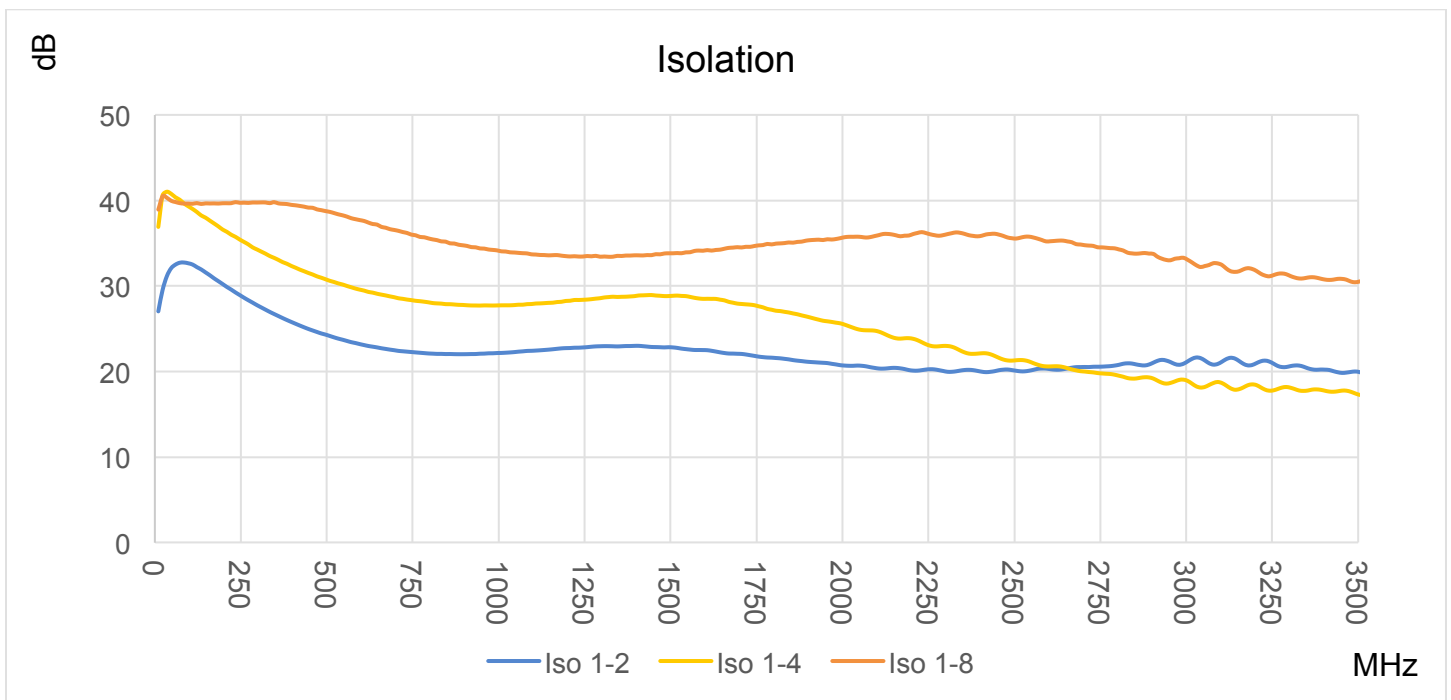
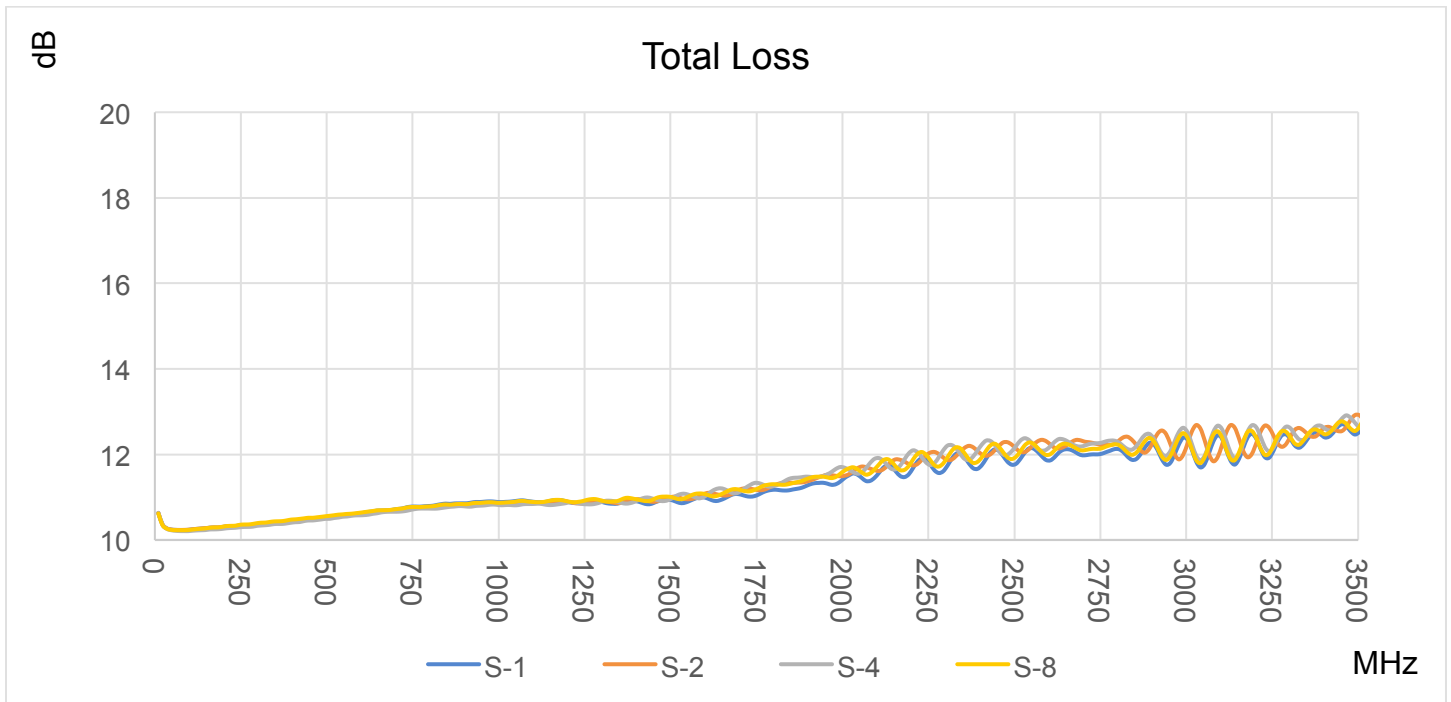
Connector Interface	SMP-Male, Full Detent
Operating Temperature ²	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	6 oz (170 g)
Humidity	10-90% non-condensing
Environment	Indoors Use Only
CAGE Code	78YZ0

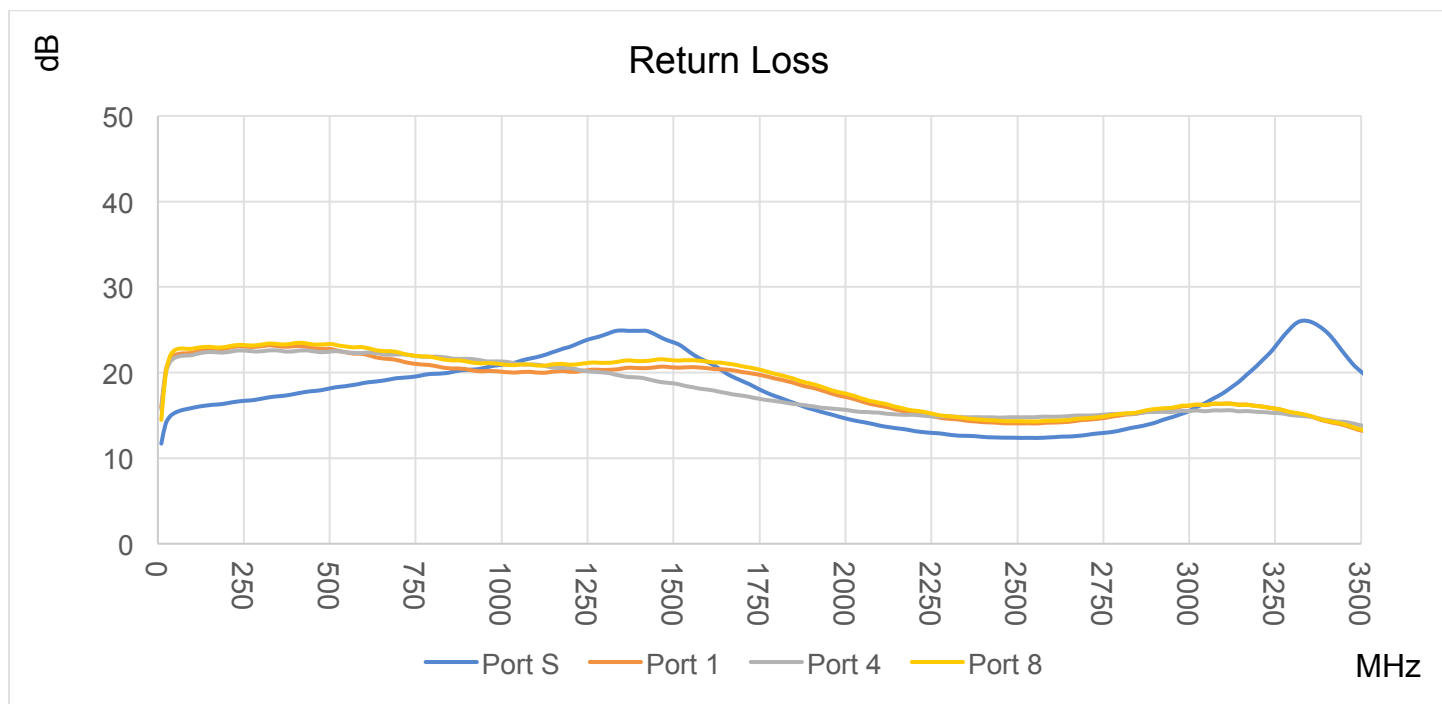
Materials

RoHS Compliant ³	Yes
REACH Compliant ³	Yes
Enclosure	Aluminum
Connectors	Brass, Gold Plated
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Clear Chemical 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.

Typical Performance at +25 °C

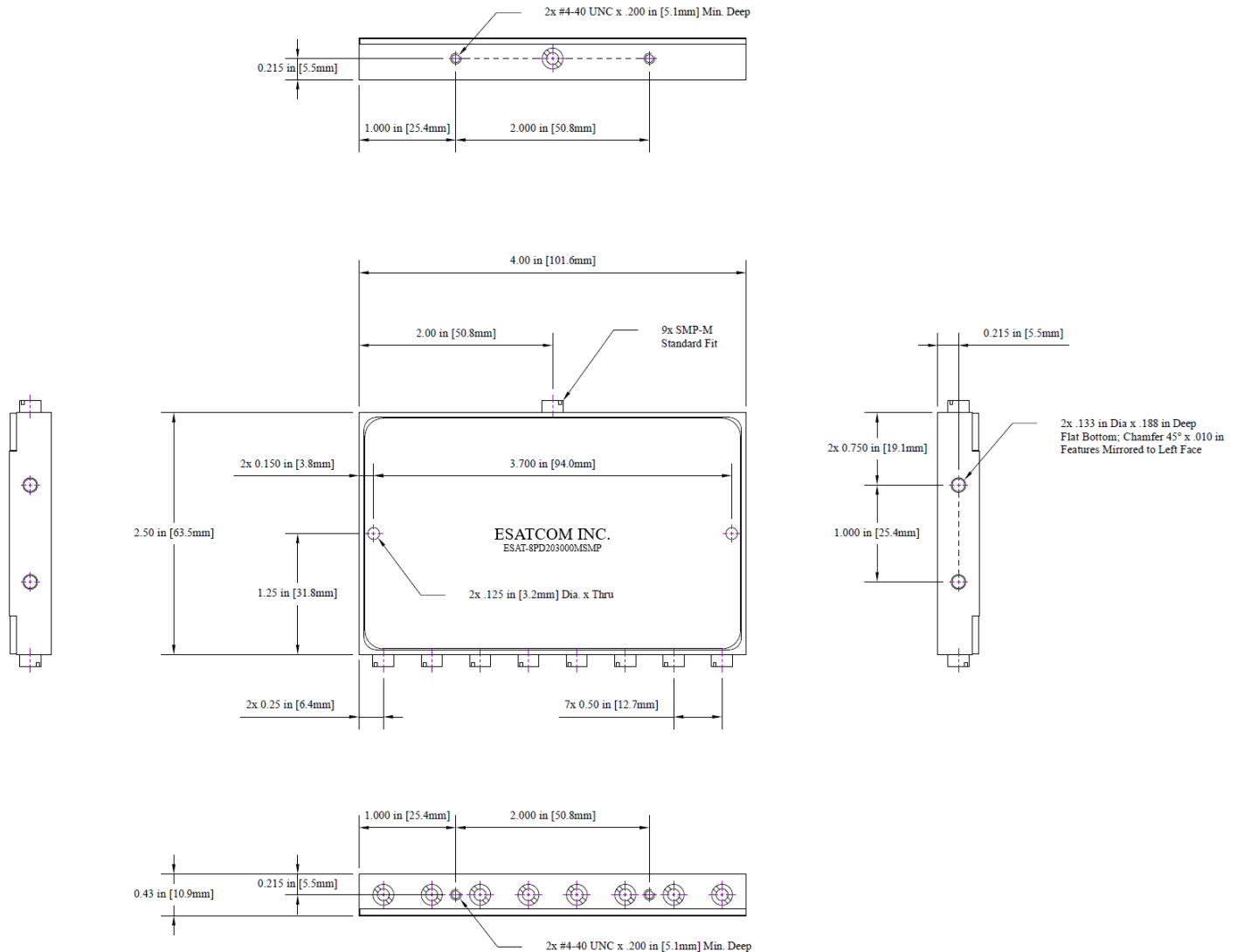




Typical Performance Data

Frequency (MHz)	Return Loss (dB)				Total Loss (dB)			Isolation (dB)		
	Port S	Port 1	Port 4	Port 8	S-1	S-4	S-8	1-2	1-4	1-8
10.0	11.69	15.94	15.66	14.49	10.64	10.64	10.62	27.07	36.91	38.90
22.5	13.99	20.14	19.81	19.76	10.36	10.35	10.35	29.54	40.60	40.51
35.0	14.86	21.55	21.21	21.88	10.27	10.26	10.27	31.16	41.03	40.32
47.4	15.26	22.01	21.68	22.57	10.25	10.23	10.24	32.09	40.78	39.97
59.9	15.48	22.18	21.89	22.79	10.24	10.22	10.23	32.51	40.38	39.83
72.4	15.64	22.24	21.98	22.82	10.24	10.21	10.23	32.73	40.09	39.70
84.9	15.75	22.25	22.00	22.77	10.23	10.21	10.23	32.75	39.66	39.64
97.3	15.85	22.31	22.04	22.79	10.24	10.21	10.23	32.66	39.32	39.64
110	15.96	22.43	22.16	22.87	10.25	10.22	10.25	32.51	39.01	39.62
210	16.48	22.93	22.44	23.11	10.32	10.28	10.33	29.89	36.34	39.68
309	17.01	23.12	22.53	23.32	10.38	10.34	10.41	27.51	34.03	39.78
409	17.60	23.12	22.57	23.49	10.46	10.42	10.48	25.60	32.15	39.44
509	18.23	22.72	22.50	23.33	10.55	10.50	10.57	24.17	30.61	38.67
609	18.85	22.08	22.35	22.89	10.64	10.58	10.65	23.10	29.47	37.61
709	19.39	21.34	22.13	22.27	10.73	10.66	10.73	22.42	28.57	36.45
808	19.86	20.76	21.88	21.73	10.80	10.73	10.79	22.10	28.01	35.45
908	20.34	20.32	21.60	21.22	10.86	10.78	10.84	22.04	27.76	34.69
1008	20.95	20.07	21.28	20.93	10.89	10.81	10.87	22.18	27.75	34.06
1507	23.44	20.59	18.70	21.42	10.92	10.99	10.99	22.83	28.86	33.83
2006	14.59	17.11	15.62	17.49	11.45	11.69	11.62	20.71	25.49	35.71
2505	12.38	14.07	14.79	14.32	11.78	12.20	11.95	20.10	21.33	35.55
3004	15.60	16.13	15.52	16.18	12.34	12.51	12.39	21.20	18.92	33.07
3503	20.01	13.21	13.80	13.33	12.53	12.64	12.64	19.96	17.30	30.53

Outline Dimensions



Outline drawing: OL-8033

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

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

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