

Power Divider, 3-way, 18-26.5 GHz, SMA Female

ESAT-3PD18265S

Description

Model ESAT-3PD18265S is a precision-manufactured 3-way power splitter that covers 18 to 26.5GHz with SMA connectors. High isolation of 23.9dB typical. Tightly controlled phase balance of 2.3 degrees typical. Return loss input of 15.3dB typ. return loss output 16.1dB typ. For use in 50-ohm system impedance. Made in USA.



Photo is representative.

Parameter	Min.	Typ.	Max.	Unit
Frequency Range	18000	--	26500	MHz
Impedance	--	50	--	Ω
Return Loss (Port S)	12.7	15.3	--	dB
Return Loss (Port 1-2)	12.7	16.1	--	dB
Insertion Loss Above 4.8dB	--	1.11	1.70	dB
Isolation	16.0	23.9	--	dB
Amplitude Unbalance ($\pm$) ¹	--	0.57	0.90	dB
Phase Unbalance ($\pm$) ¹	--	2.3	5.0	Degree
Input Power (CW) ²	--	--	10	W

Mechanical

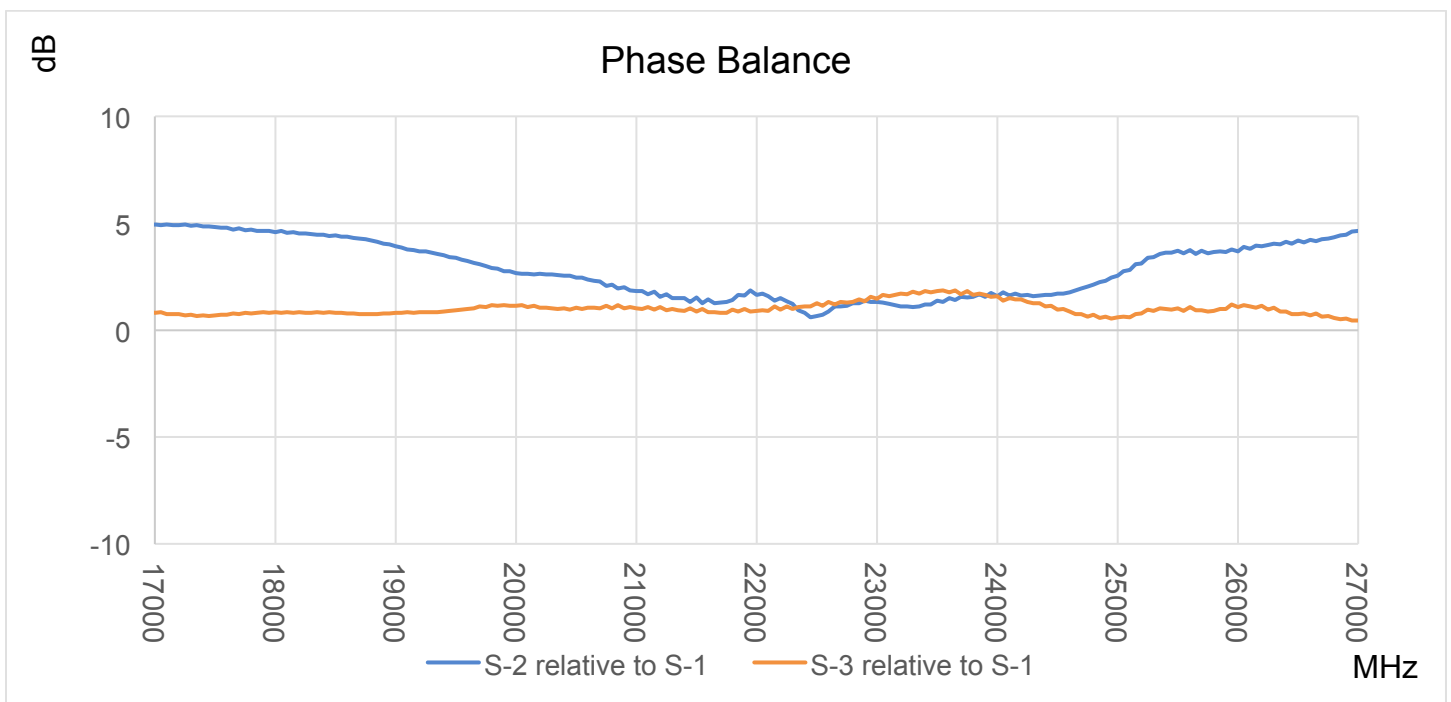
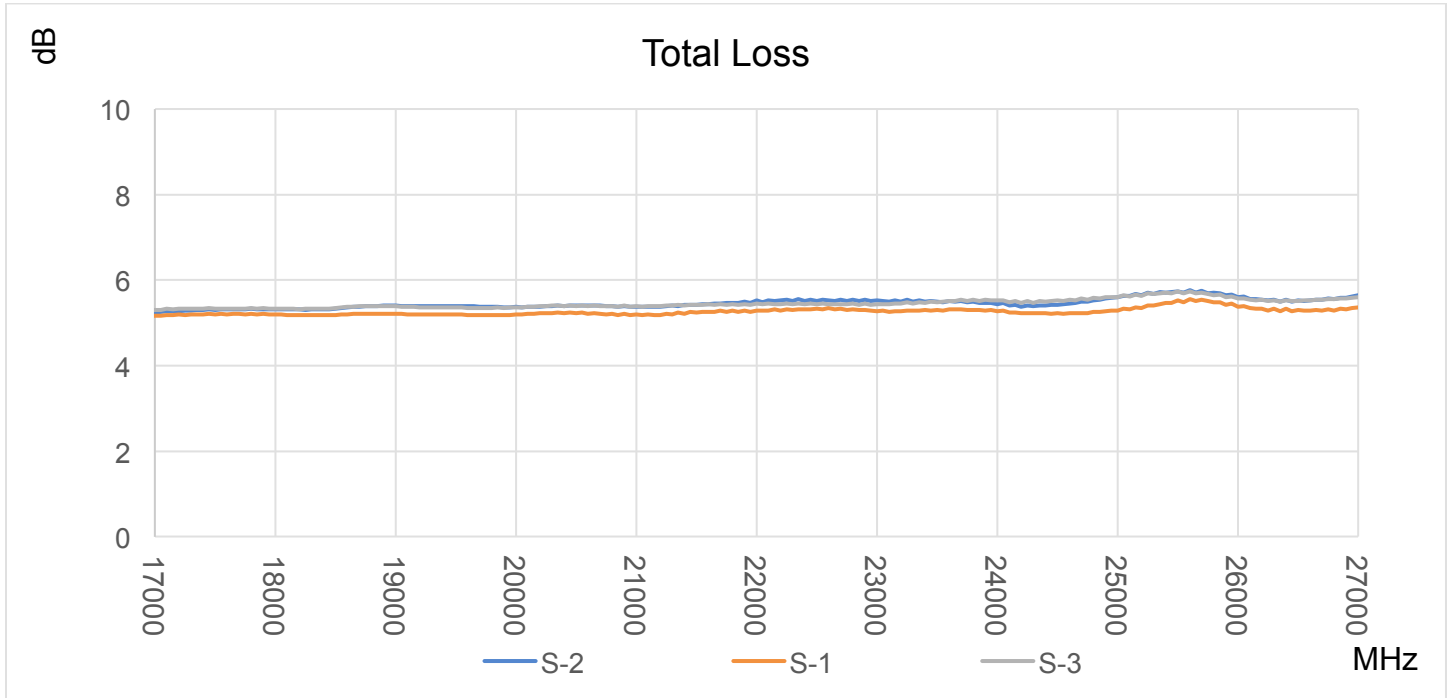
Connector Interface	SMA-Female
Operating Temperature ³	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Nominal Weight	27.5 g (0.97 oz)
Humidity	10-90% non-condensing
Environment	Indoors Use Only
CAGE Code	87MG8

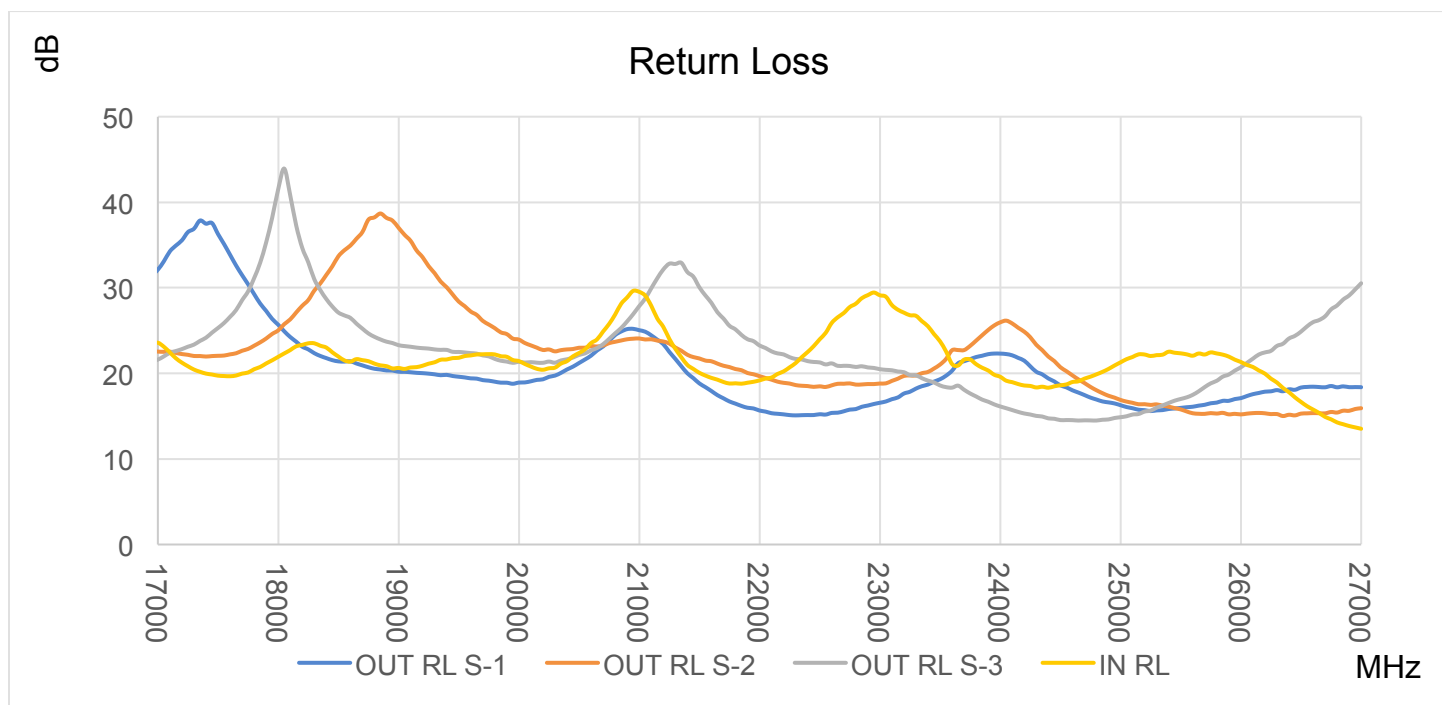
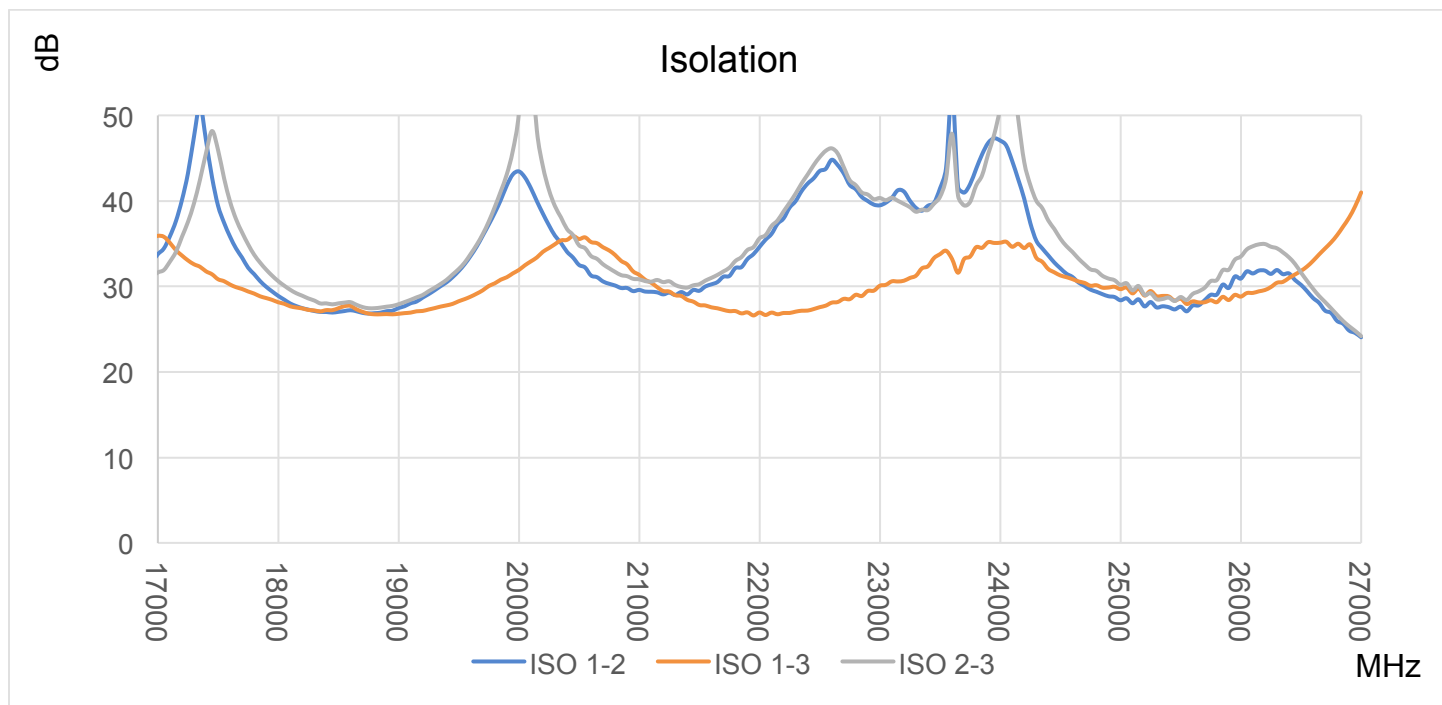
Materials

RoHS Compliant ⁴	Yes
REACH Compliant ⁴	Yes
Enclosure	Aluminum
Connectors	Stainless Steel
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Green Paint

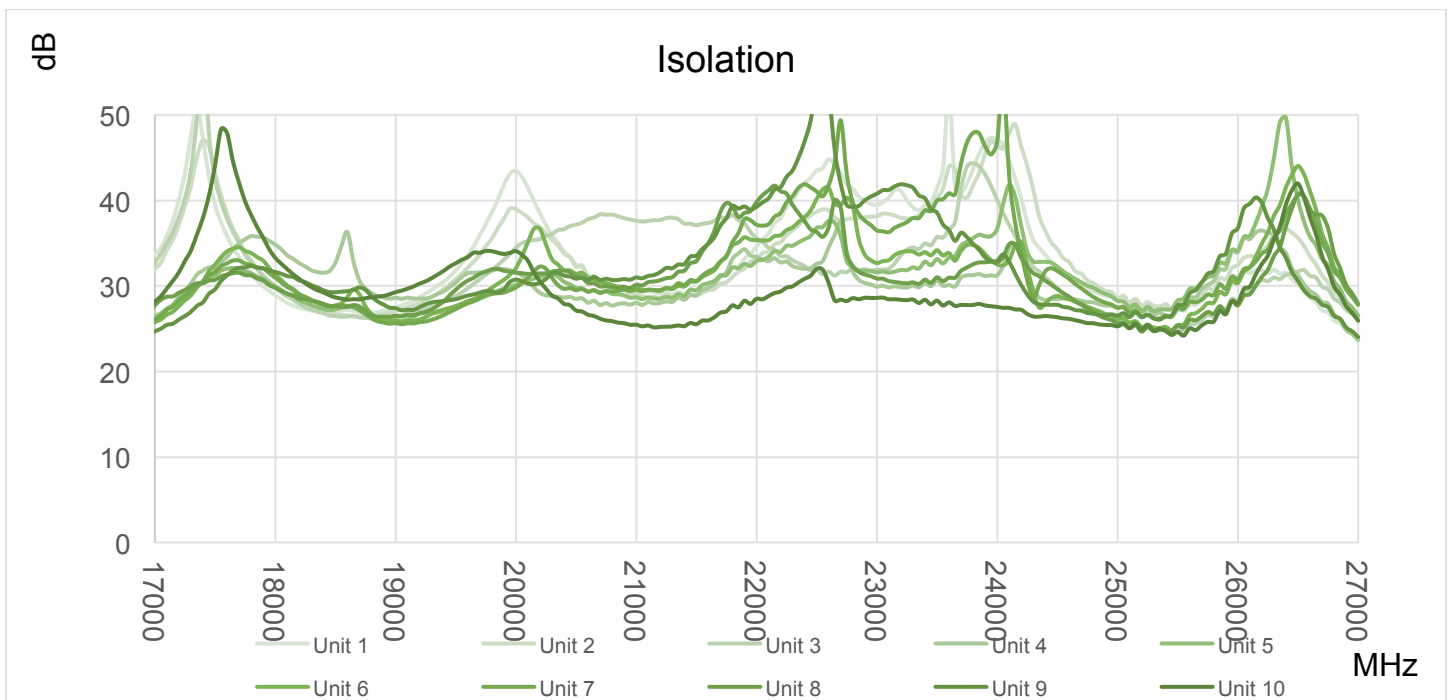
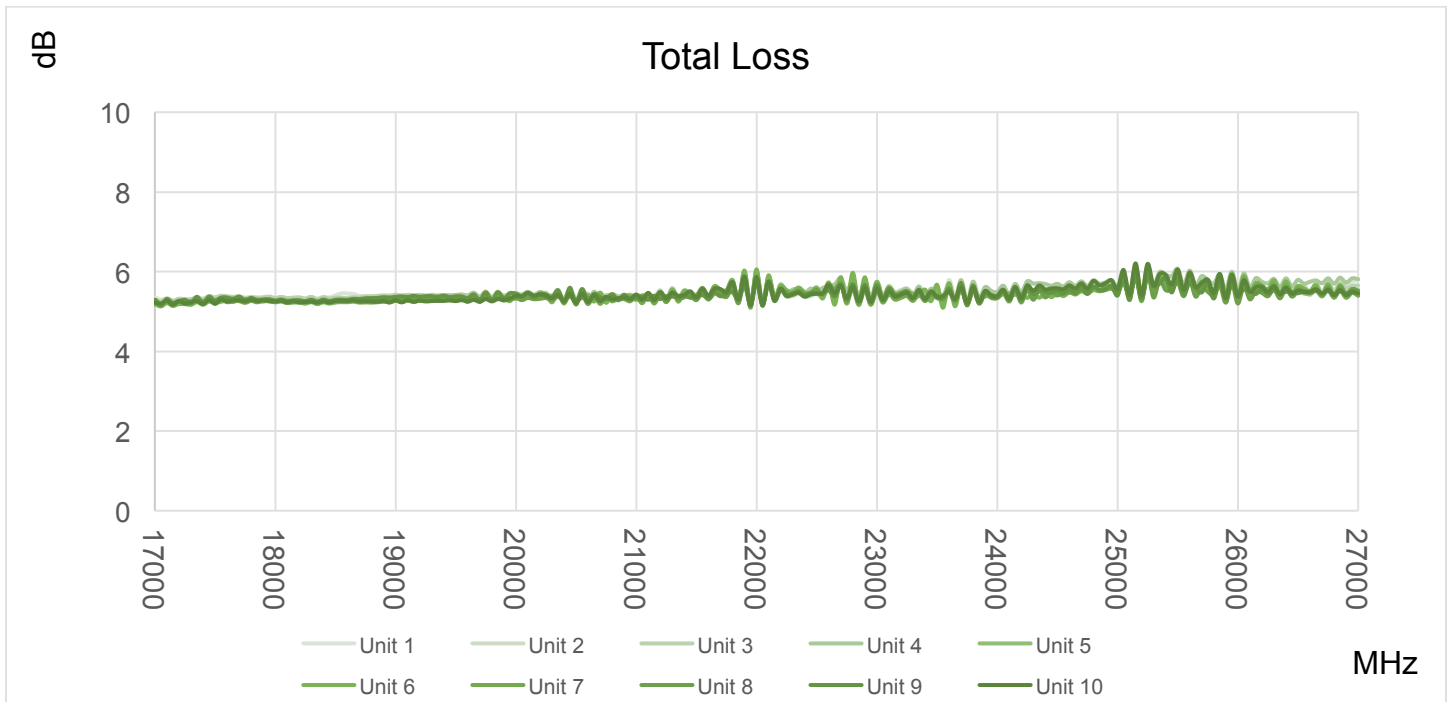
1. With reference to average.
2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
3. Electrical specifications at +25 °C.
4. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C





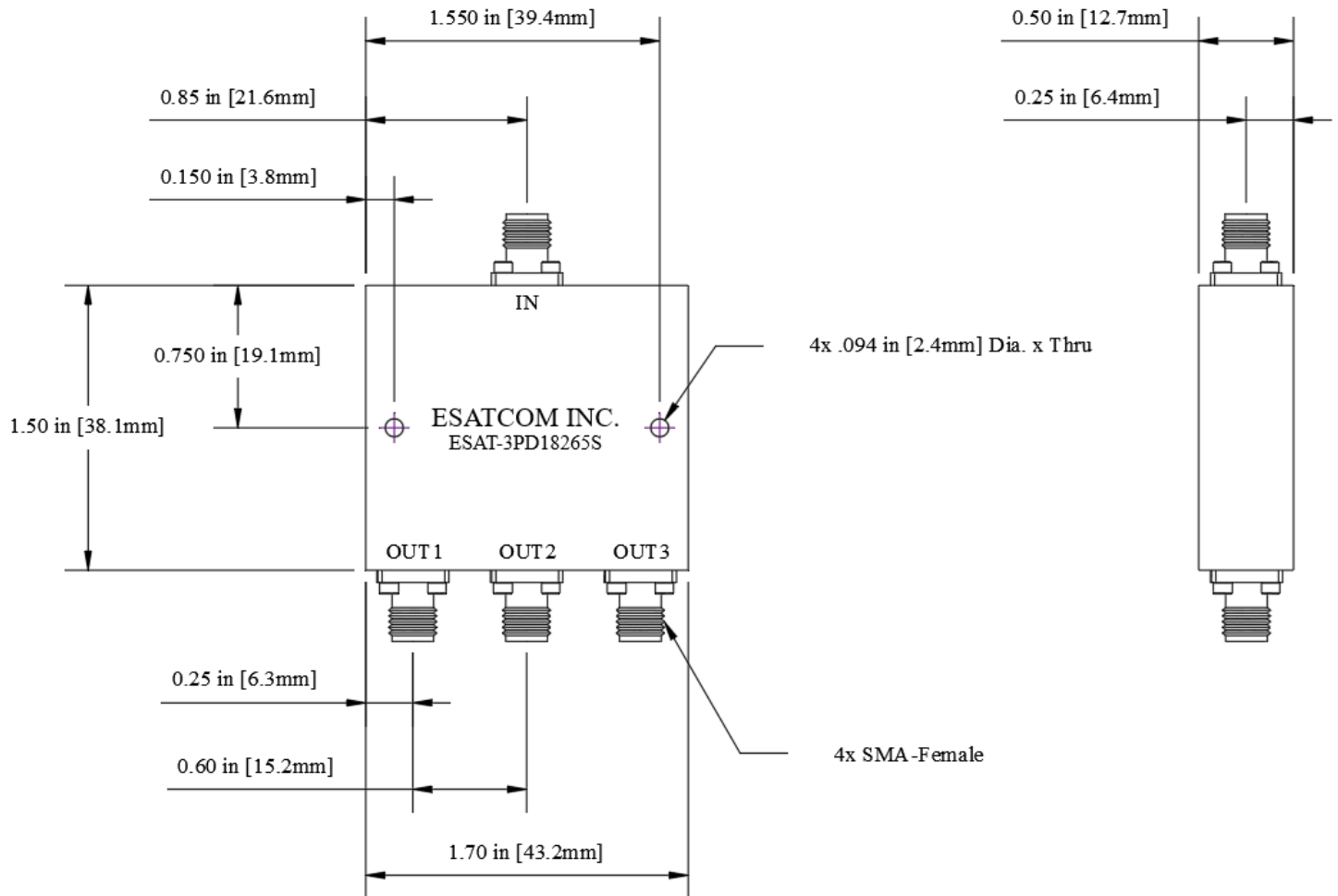
Repeatability in Production



Typical Performance Data

Frequency (MHz)	Return Loss (dB)				Total Loss (dB)			Isolation (dB)		
	Port S	Port 1	Port 2	Port 3	S-1	S-2	S-3	1-2	1-3	2-3
1000	6.16	8.32	8.82	8.42	6.11	6.08	6.08	7.44	7.11	7.41
2000	7.20	11.56	12.23	11.26	5.93	5.89	5.97	10.11	10.28	10.31
3000	9.29	15.30	14.38	14.96	5.61	5.18	5.64	12.28	13.43	12.92
4000	9.52	15.42	16.42	15.59	5.72	5.36	5.70	14.49	16.46	14.96
5000	10.45	12.86	17.86	12.73	5.14	5.45	5.16	17.40	18.99	17.14
6000	12.23	12.10	17.91	12.08	5.46	5.35	5.47	20.57	23.38	20.52
7000	13.41	11.80	15.79	11.78	5.80	5.30	5.83	23.78	28.10	23.89
8000	11.45	9.67	15.67	9.79	5.61	5.33	5.61	27.72	36.05	27.10
9000	10.93	9.88	19.20	9.75	5.51	5.37	5.54	28.47	35.53	28.02
10000	10.39	11.94	14.62	11.17	5.54	5.70	5.60	24.36	26.92	24.94
11000	7.62	9.49	10.21	9.75	6.46	6.53	6.42	20.97	26.15	21.00
12000	8.92	12.12	11.19	12.07	5.54	5.61	5.54	18.56	25.63	18.22
13000	12.32	20.47	13.39	17.13	5.30	5.51	5.33	18.33	25.50	17.81
14000	14.21	21.28	17.11	20.15	5.37	5.37	5.43	20.08	26.86	19.60
15000	17.76	28.00	27.22	30.07	5.24	5.18	5.26	24.19	32.89	23.31
16000	19.57	26.88	22.45	21.11	5.19	5.09	5.19	24.96	43.43	24.09
17000	23.59	32.12	22.55	21.61	5.35	5.27	5.43	33.78	35.93	31.64
18000	21.94	25.69	25.03	41.52	5.30	5.17	5.31	28.91	28.16	30.63
19000	20.64	20.20	37.03	23.30	5.40	5.23	5.39	27.49	26.81	27.93
20000	21.44	18.93	23.95	21.35	5.47	5.27	5.39	43.46	31.93	50.22
21000	29.54	25.05	24.08	27.86	5.33	5.26	5.43	29.60	31.37	30.85
22000	19.19	15.66	19.68	23.27	5.96	5.32	5.61	34.63	26.96	35.64
23000	29.14	16.57	18.82	20.49	5.71	5.26	5.61	39.49	30.09	40.35
24000	19.61	22.32	25.97	16.14	5.35	5.20	5.43	47.06	35.12	50.89
25000	21.29	16.28	16.90	14.88	5.64	5.24	5.47	28.39	29.69	30.20
26000	21.34	17.11	15.21	20.71	5.23	4.98	5.41	30.93	28.82	33.51
27000	13.53	18.39	15.93	30.54	5.79	5.47	5.65	24.07	41.00	24.20

Outline Dimensions



Outline drawing: OL-03-1826

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

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

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