

3628 Francis Lewis Blvd. Flushing, NY 11358 www.esatcom.com Tel: 718.799.0084 Email: sales@esatcom.com

Power Divider, 6-way, 18-26.5 GHz, SMA Female

### ESAT-6PD18265S



Parameter	Min.	Тур.	Max.	Unit
Frequency Range	18000		26500	MHz
Impedance		50		Ω
Return Loss (Port S)	13.7	15.3		dB, min.
Return Loss (Port 1-6)	12.0	15.4		dB, min.
Insertion Loss above 7.8dB		1.4	1.9	dB, max.
Isolation	18	21.1		dB, min.
Amplitude Unbalance (±)¹		0.37	0.5	dB, max.
Phase Unbalance (±)1		5.9	12	Degree, max.
Input Power (CW) <sup>2</sup>		10		W, max.

Connector Interface	SMA Female
Operating Temperature <sup>3</sup>	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Nominal Weight	164 g (5.78 oz)
Operating Humidity	10-90% (non-condensing)
Operating Environment	Indoor Use Only
HTSUS Code	8548.00.0000
ECCN	EAR99

RoHS Status <sup>4</sup>	RoHS3 Compliant
REACH Status <sup>4</sup>	REACH Unaffected
Enclosure Material	Aluminum
Connectors Material	Stainless Steel
Contacts Material	Beryllium Copper, Gold Plated
Insulators Material	Virgin PTFE
Finish	Green Paint
Country of Origin	United States of America

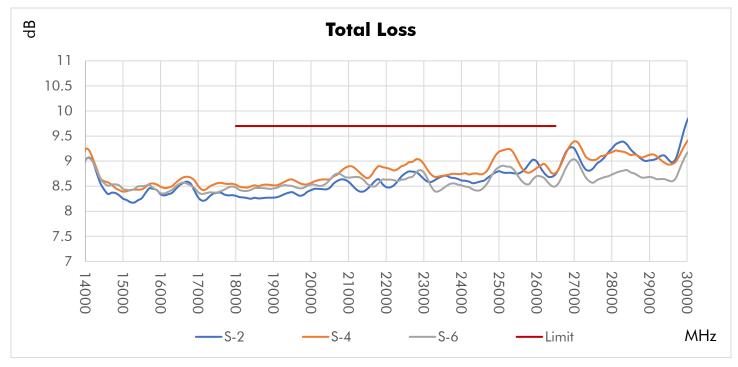
- 1. With reference to average.
- 2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
- 3. Electrical specifications are tested at +25 °C.
- 4. To the best of our knowledge at the time of publication.

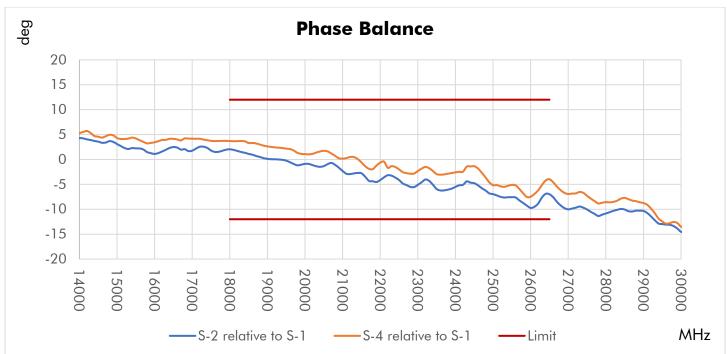
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# Typical Performance at +25 °C



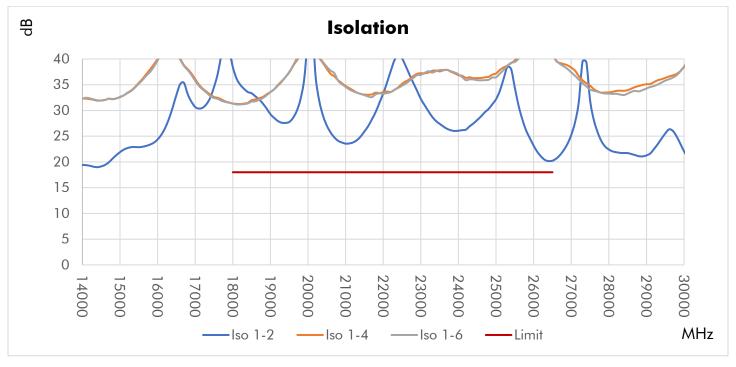


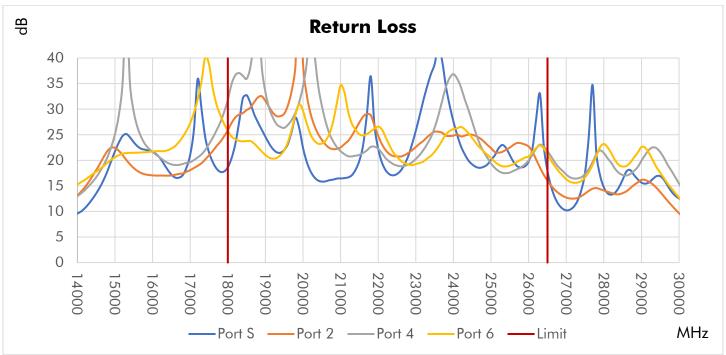
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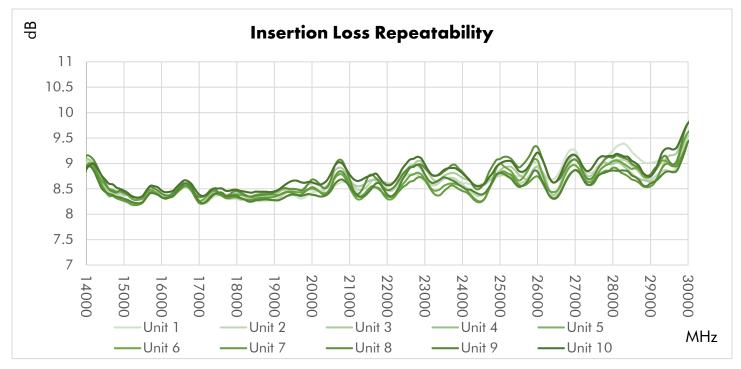
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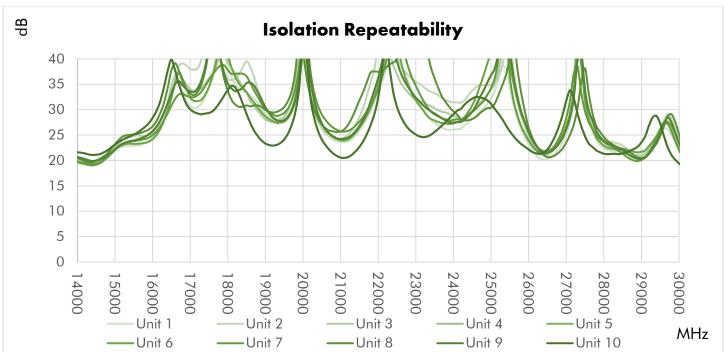


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## **Repeatability in Production**





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# **Typical Performance Data**

Frequency (MHz)	Return Loss (dB)				Total Loss (dB)			Isolation (dB)		
	Port S	Port 2	Port 4	Port 6	S-2	S-4	S-6	1-2	1-4	1-6
14000	9.61	13.13	13.01	15.28	9.02	9.24	9.03	19.41	32.32	32.29
15000	21.77	22.42	25.1 <i>7</i>	20.61	8.25	8.39	8.44	21.91	32.63	32.58
16000	21.67	1 <i>7</i> .05	21.61	21.72	8.34	8.49	8.36	24.38	39.99	39.72
17000	21.11	18.08	19.63	27.29	8.27	8.51	8.38	30.67	36.09	35.74
18000	18.64	25.88	31.81	25.79	8.31	8.53	8.47	38.42	31.35	31.34
19000	24.59	31.60	33.32	21.02	8.27	8.52	8.46	29.27	33.60	33.57
20000	22.40	38.81	34.52	29.65	8.42	8.57	8.53	44.36	41.92	42.31
21000	16.45	22.53	21.78	34.69	8.59	8.90	8.67	23.56	34.75	34.59
22000	22.20	24.77	22.24	26.58	8.48	8.87	8.63	33.31	33.58	33.27
23000	25.81	22.61	20.28	19.26	8.65	8.94	8.77	32.22	37.25	36.91
24000	27.56	24.81	36.83	26.10	8.62	8.74	8.52	26.08	36.85	3 <i>7</i> .03
25000	20.13	22.38	19.36	20.41	8.80	9.19	8.88	32.21	37.20	36.45
26000	19. <i>7</i> 4	22.70	19.96	20.73	8.99	8.86	8.70	23.17	42.87	42.20
27000	10.22	12. <i>7</i> 1	1 <i>7</i> .21	16.29	9.25	9.39	9.04	25.26	38.33	37.40
28000	14.70	14.09	21.41	23.19	9.25	9.18	8.73	22.42	33.51	33.28
29000	15.63	16.1 <i>7</i>	19.93	22.60	9.02	9.13	8.69	21.27	35.11	34.28
30000	12.55	9.66	15.45	12.70	9.80	9.39	9.16	22.06	38.52	38.42

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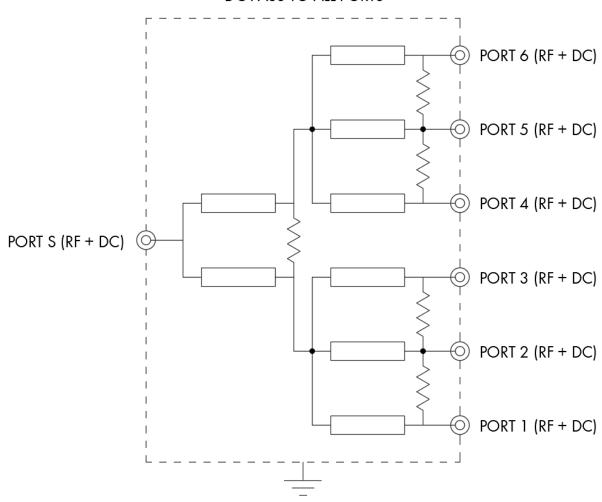


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# **Simplified Electrical Schematic**

#### DC PASS TO ALL PORTS



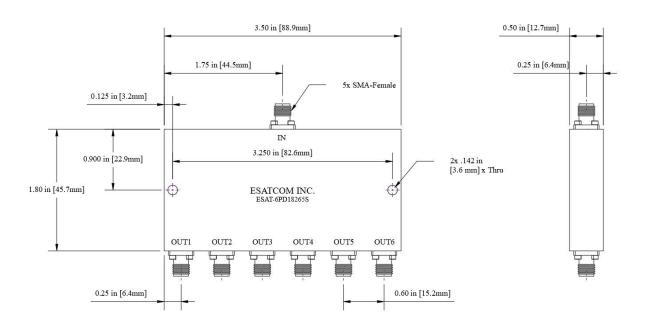
**ENCLOSURE GROUND** 

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#### **Outline Dimensions**



Outline drawing: OL-06-1826

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

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