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

Power Divider, 2-way, 0.5-26.5 GHz, SMA Female

ESAT-2PD005265S

Description

Model ESAT-2PD005265S from Esatcom Inc.is a wideband 2-way in-line power splitter covering of 500 MHz to 26.5 GHz with excellent return loss, low insertion loss, and high isolation performance. With ultrawideband performance, amplitude balance is typically 0.24dB and phase unbalance is typically 2.6deg. Insertion loss is low for the bandwidth, coming in at a typical 1.2dB above 3dB splitting loss. Return loss 16dB typical. Isolation 18dB typical. The device is precision-assembled and tested in the USA.

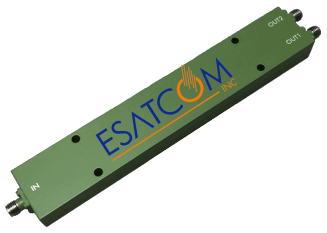

Image is representative.

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range	--	500	--	26500	MHz
Impedance	--	--	50	--	Ω
Return Loss (Port S)	500-8000	12	20	--	dB
	8000-18000	12	14		
	18000-26500	12	16		
Return Loss (Port 1-2)	500-8000	14	16	--	dB
	8000-18000	13	15		
	18000-26500	12	14		
Insertion Loss Above 3.0dB	500-8000	--	0.6	1.1	dB
	8000-18000		1.2	1.8	
	18000-26500		1.8	2.3	
Isolation	500-1000	14	16	--	dB
	1000-18000	16	21		
	18000-26500	14	18		
Amplitude Unbalance (±)[1]	500-8000	--	0.06	0.20	dB
	8000-18000		0.24	0.45	
	18000-26500		0.36	0.60	
Phase Unbalance (±)[1]	500-8000	--	1.5	3.0	Degree
	8000-18000		2.6	5.0	
	18000-26500		3.4	6.0	
Input Power (CW)[2]	--	--	--	10	W

Mechanical

Connector Interface	*SMA-Female*
Operating Temperature[3]	*-55 to +85 °C*
Storage Temperature	*-55 to +100 °C*
Weight Estimate	*141g (4.97 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.*

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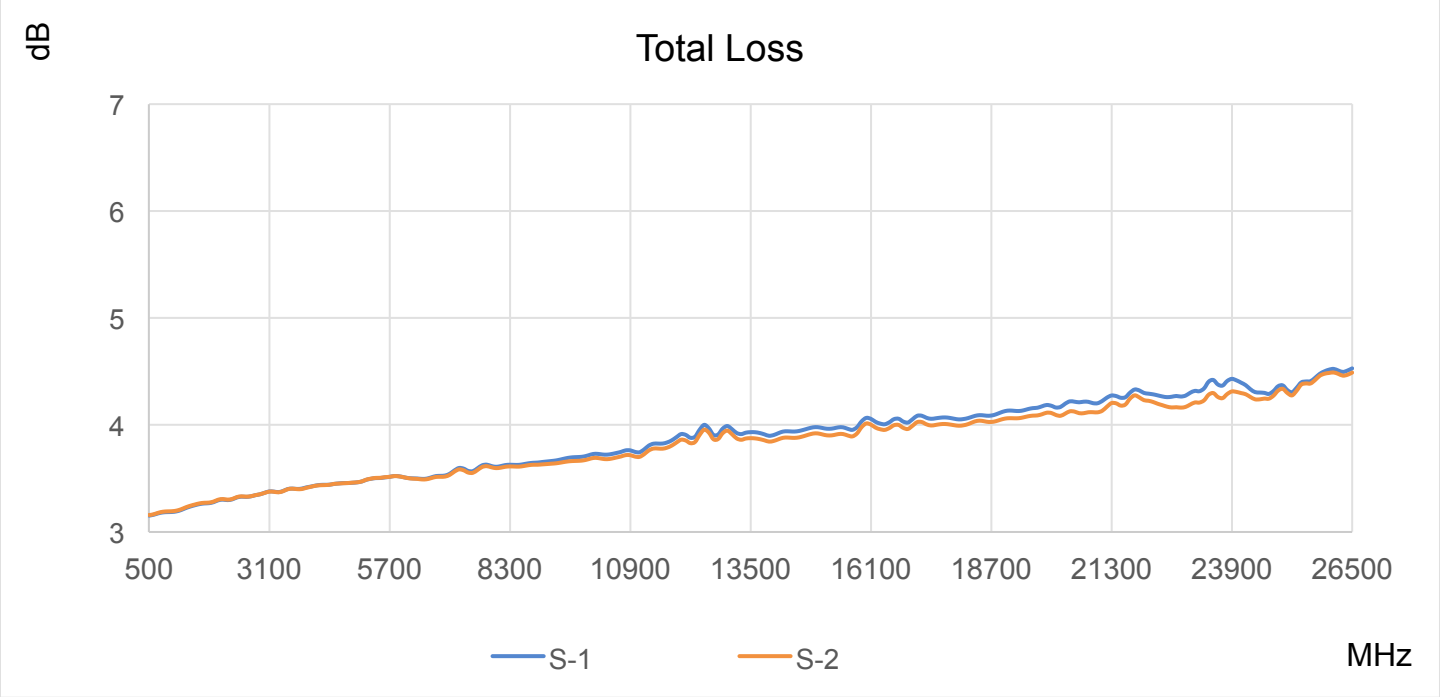
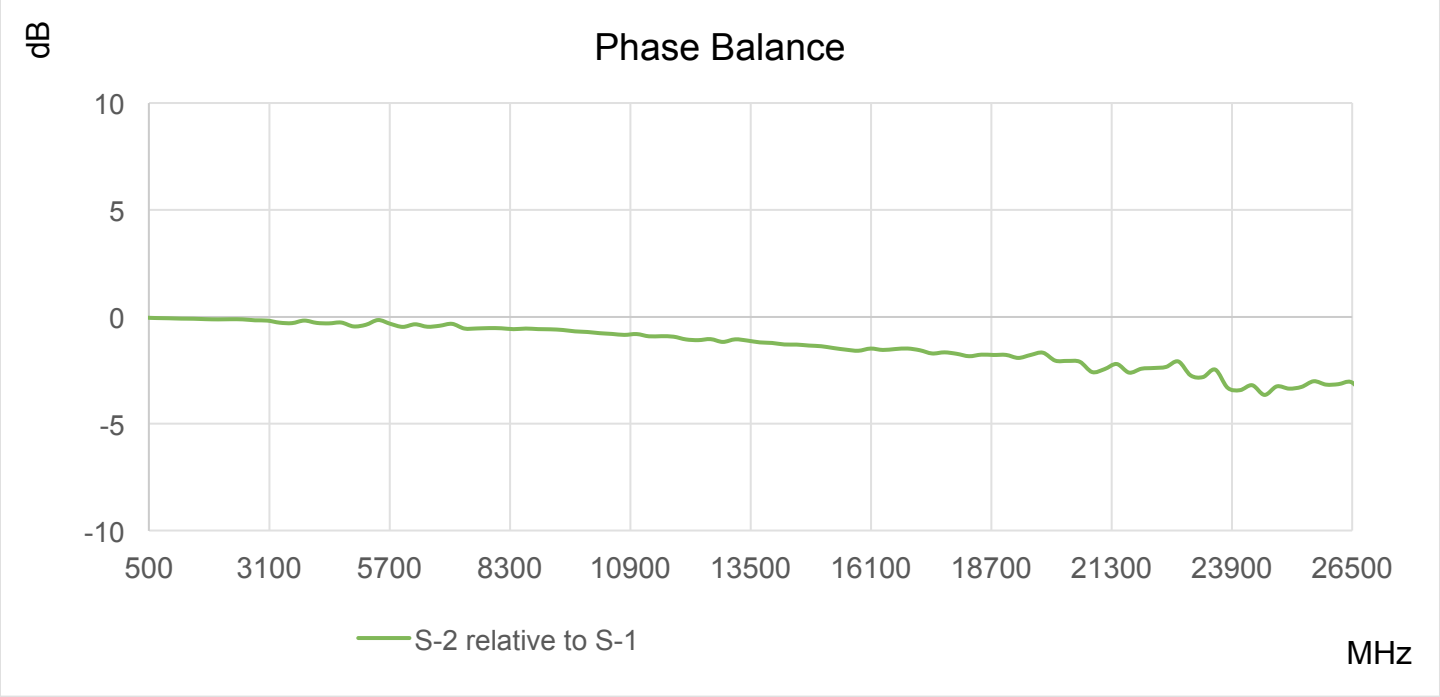
Typical Performance at +25 °C





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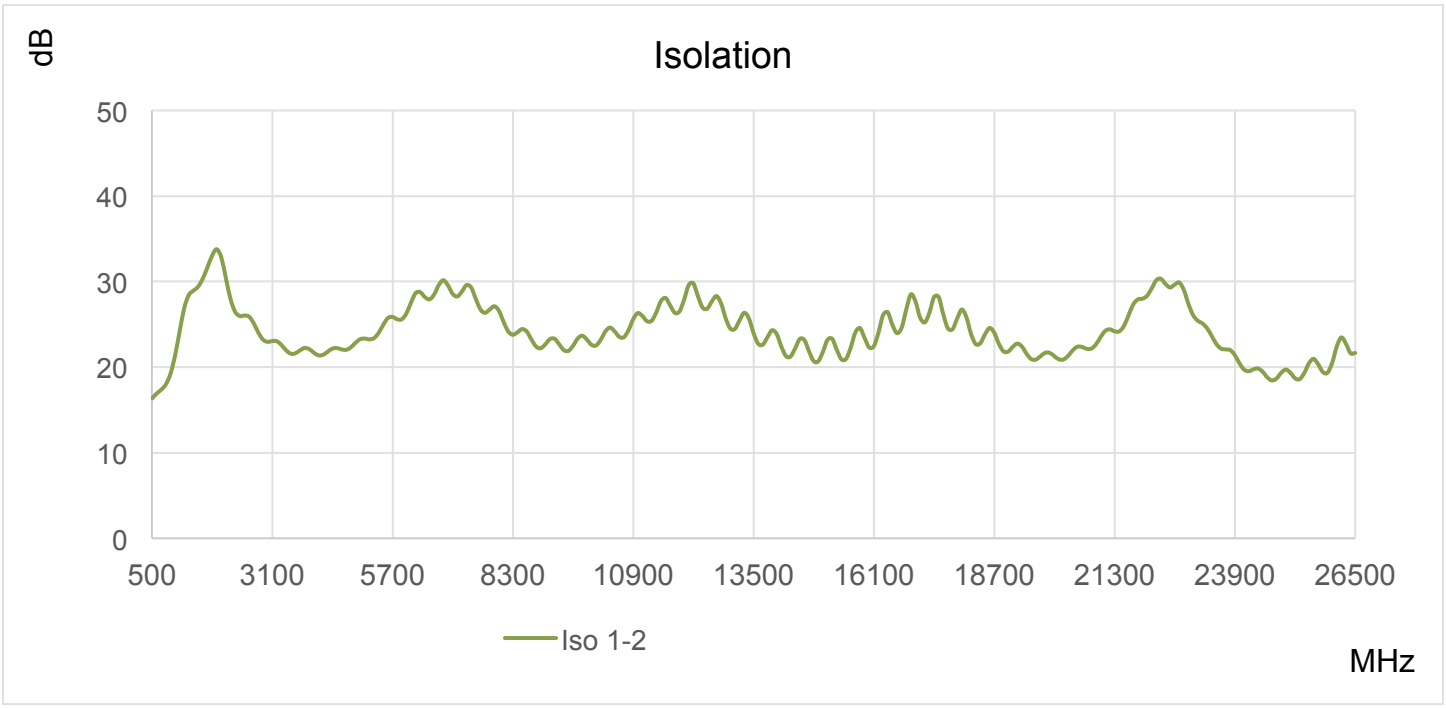

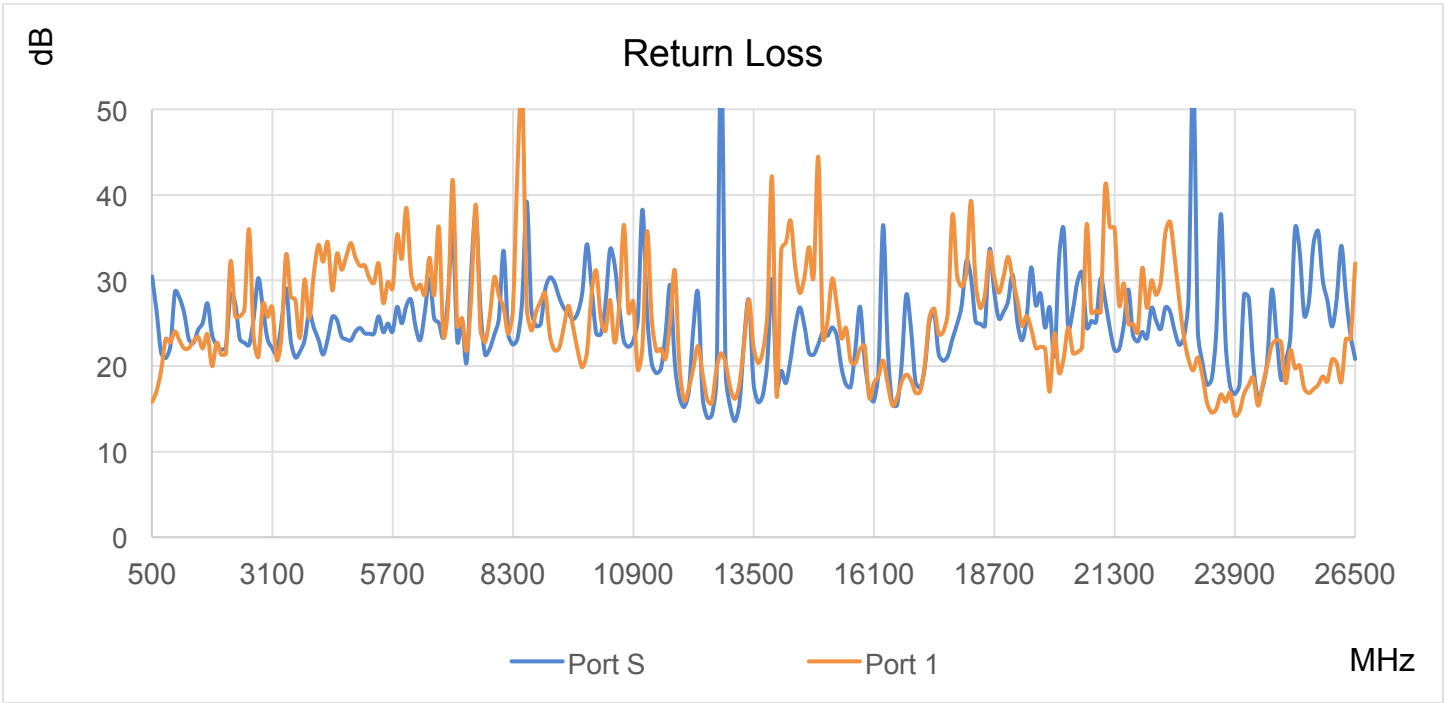

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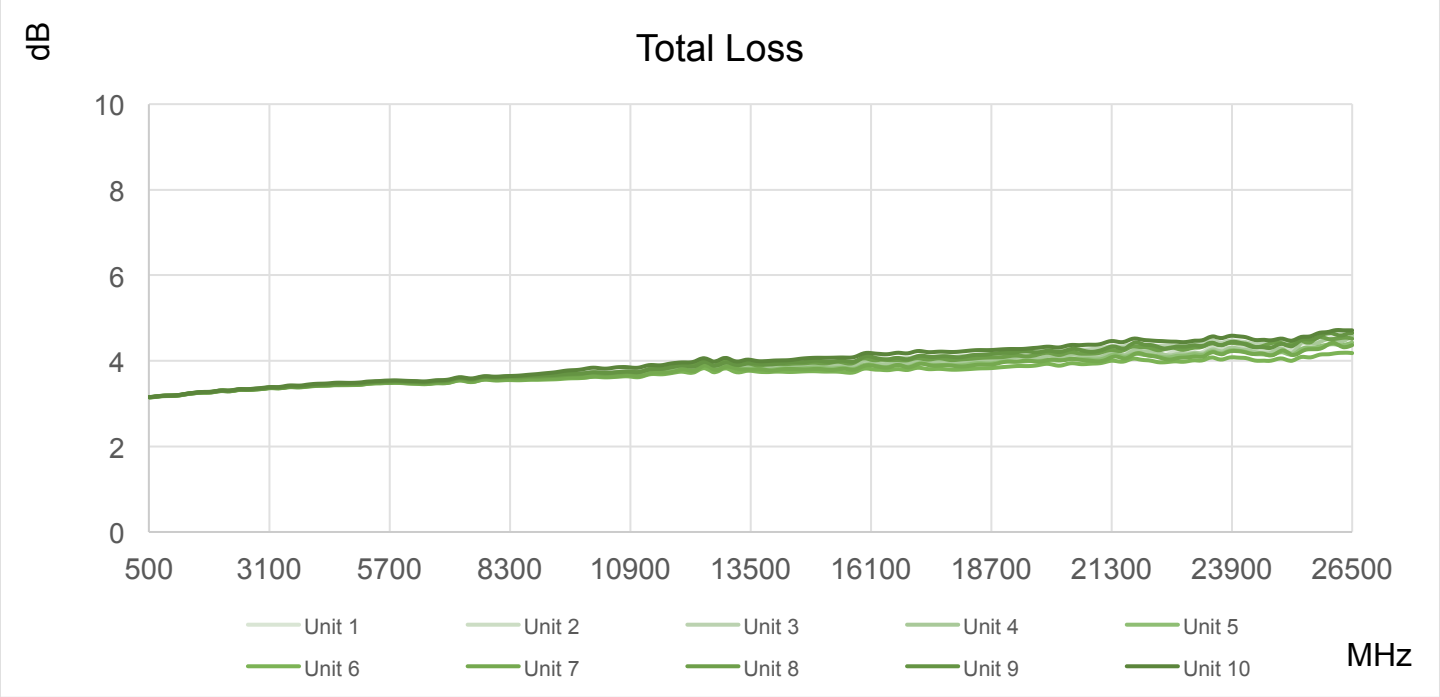
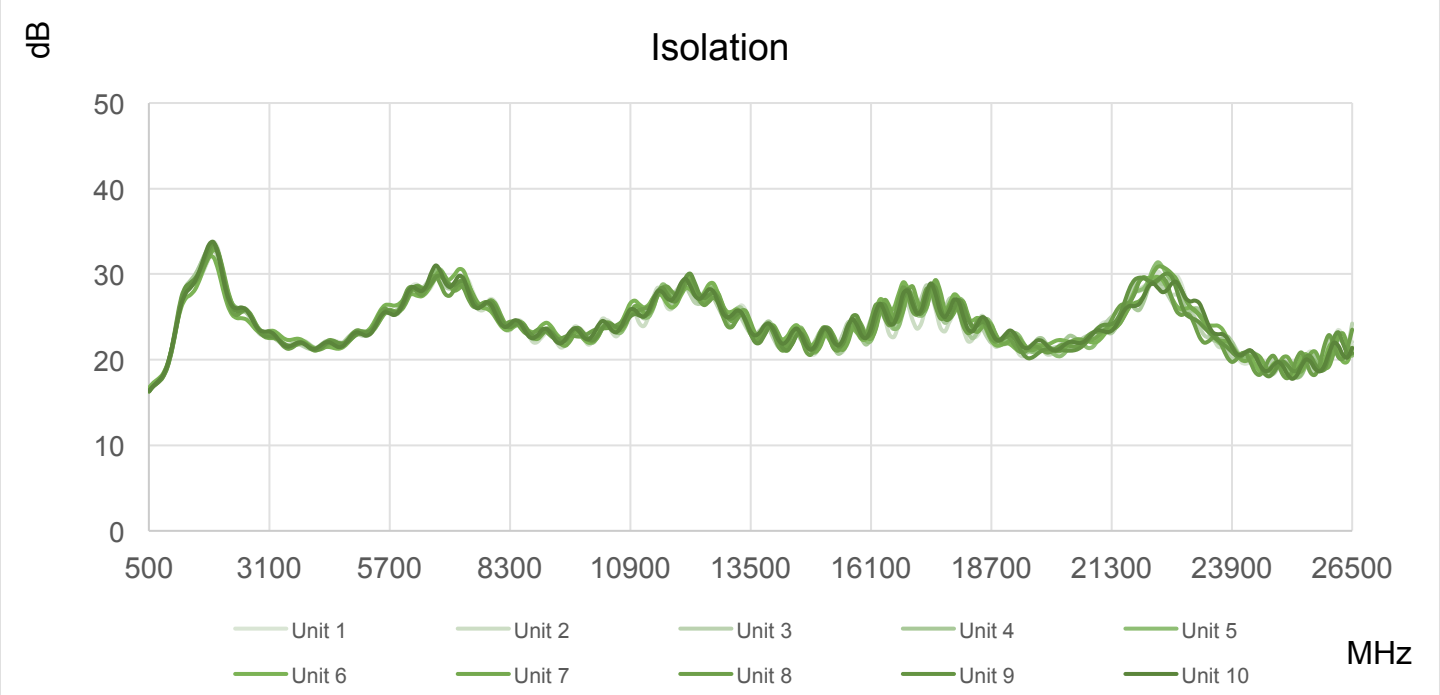
Repeatability in Production





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Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)
	Port S	Port 1	Port 2	S-1	S-2	1-2
500	31.48	15.79	15.71	3.13	3.14	17.42
600	24.36	16.93	16.77	3.14	3.15	17.44
700	20.64	18.99	18.73	3.15	3.17	17.57
800	20.32	21.76	21.39	3.16	3.18	18.01
900	22.60	24.32	23.82	3.16	3.18	19.15
1000	28.79	24.46	24.02	3.16	3.18	21.17
1500	25.29	23.48	23.50	3.22	3.23	28.98
2000	22.97	21.41	21.54	3.27	3.28	32.58
2500	21.94	22.16	22.24	3.28	3.30	25.40
3000	23.50	26.02	25.82	3.30	3.31	22.79
3500	22.86	30.75	30.30	3.34	3.35	21.46
4000	22.48	36.80	38.47	3.36	3.37	21.08
4500	23.94	29.52	30.32	3.38	3.39	21.88
5000	25.11	29.21	29.92	3.39	3.39	23.00
5500	26.72	32.50	32.51	3.40	3.39	24.74
6000	24.52	33.71	31.62	3.41	3.40	26.21
6500	23.14	29.07	28.73	3.42	3.41	28.10
7000	22.43	29.77	29.83	3.44	3.43	27.93
7500	23.66	34.60	33.19	3.46	3.44	26.85
8000	27.71	30.83	29.26	3.44	3.43	25.73
8500	40.65	27.55	25.82	3.46	3.44	24.31
9000	30.09	26.89	25.48	3.47	3.46	22.83
9500	27.56	31.01	28.41	3.50	3.48	21.80
10000	26.81	29.92	29.71	3.53	3.50	21.52
11000	39.53	26.40	26.81	3.60	3.56	25.53
12000	20.12	22.21	21.71	3.72	3.67	28.23
13000	16.22	19.84	18.90	3.87	3.84	24.66
14000	19.92	25.88	24.83	3.86	3.80	23.14
15000	29.45	26.67	25.07	3.89	3.83	22.13
16000	21.36	27.27	24.69	3.97	3.93	21.45
17000	21.35	27.92	24.45	3.99	3.94	26.20
18000	30.30	28.83	26.00	4.02	3.97	26.85
19000	21.26	26.69	24.03	4.09	4.06	22.16
20000	23.43	30.60	36.36	4.19	4.13	20.75
21000	27.82	25.28	31.89	4.16	4.11	22.18
22000	24.77	29.42	25.85	4.27	4.23	27.92
23000	30.46	27.93	34.30	4.32	4.24	25.21
24000	28.67	21.23	25.98	4.38	4.31	21.37
25000	24.08	30.23	30.32	4.33	4.37	19.60
26000	32.93	25.89	23.55	4.48	4.51	20.19
26500	29.73	27.25	25.20	4.50	4.55	20.06

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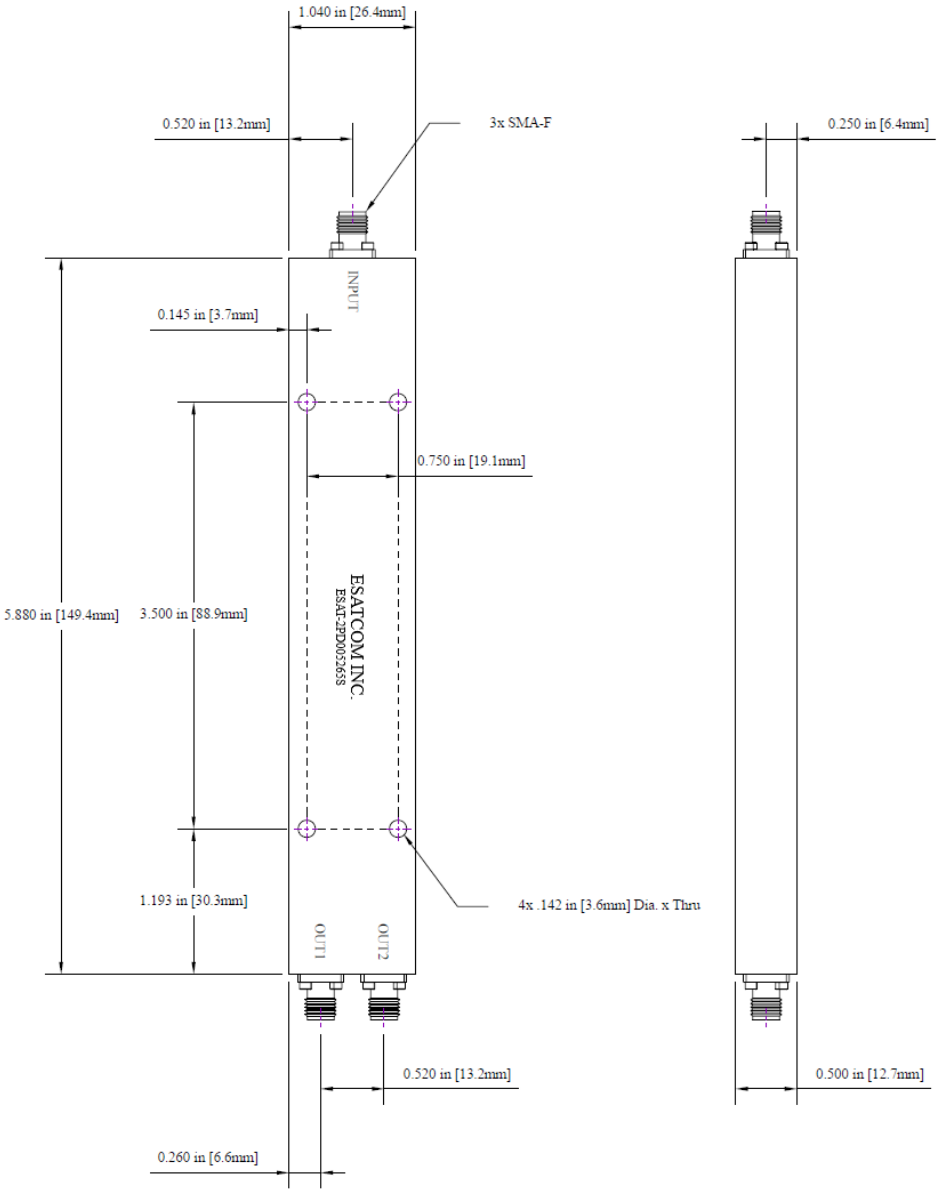
Outline Dimensions



Outline drawing: OL-2300
Dimensions are in inches, [mm] shown for convenience.
Tolerances on 2-pl decimals: ±.03. 3-pl decimals: ± .015.