

Power Divider, 2-way, 0.5-6 GHz, SMA Female

ESAT-2PD00506S

Description

Model ESAT-2PD00506S is a 2-way power splitter covering the continuous bandwidth of 500 MHz to 6 GHz in a small sized enclosure with versatile mounting options. The device is RoHS compliant. This part has versatile mounting options. Standard through holes mount the part from the broad surface, while threaded holes allow for bulkhead rack-mountable mounting. Typical insertion loss of 0.7dB. Typical isolation of 23dB. Return loss 19dB typical. Amplitude balance 0.2dB typical. Phase balance 2 degrees typical.



Photo is representative.

Specifications		Min.	Typ.	Max.	Units
Frequency		500	--	6000	MHz
Impedance		--	50	--	Ohm
Return Loss (Port S)		12.7	17.3	--	dB
Return Loss (Port I-2)		15.6	19.1	--	dB
Insertion Loss (above 3.01 dB)		--	0.7	0.9	dB
Isolation	500-600 MHz	15	21	--	dB
	600-6000 MHz	18	23		
Amplitude Balance		--	0.2	0.5	dB
Phase Balance		--	2	6	Degrees
Input Power (CW) ¹	500-2700 MHz	--	--	50	Watts (CW)
	2700-6000 MHz			30	

Mechanical

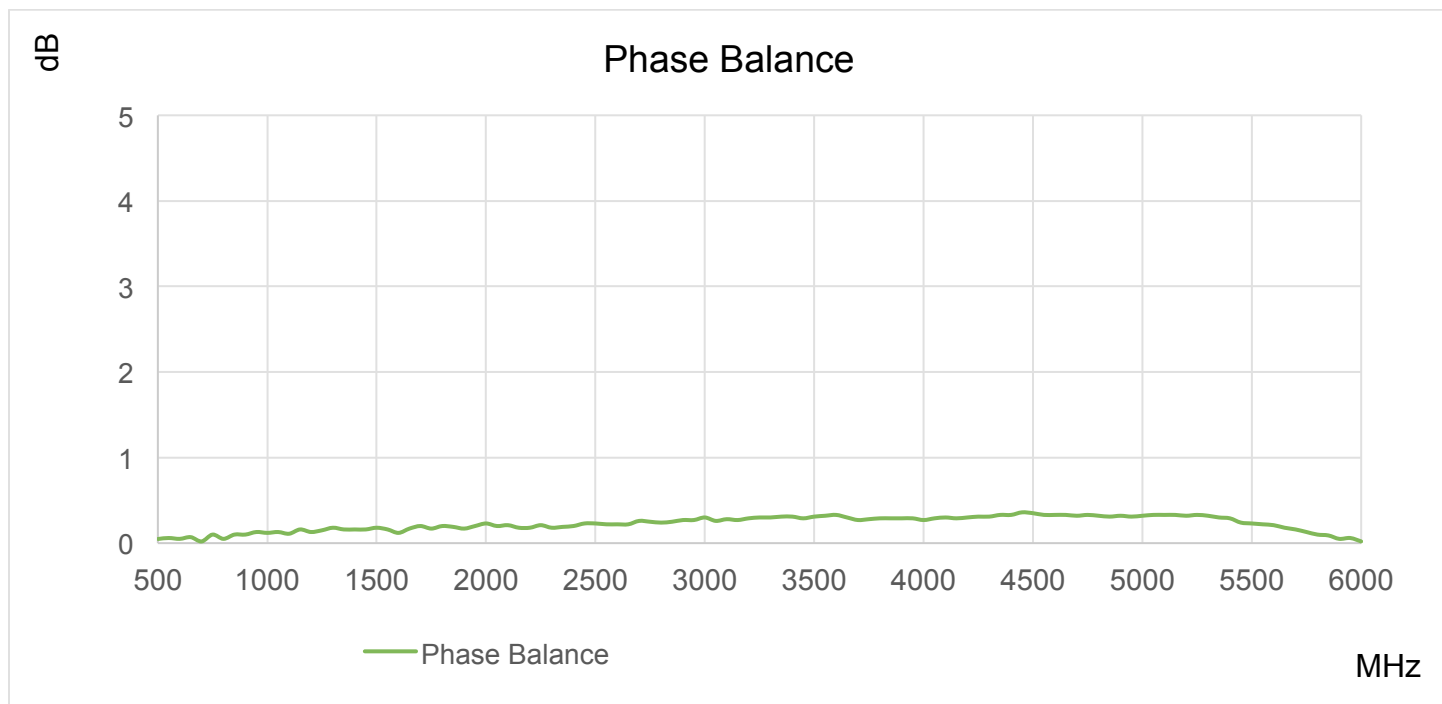
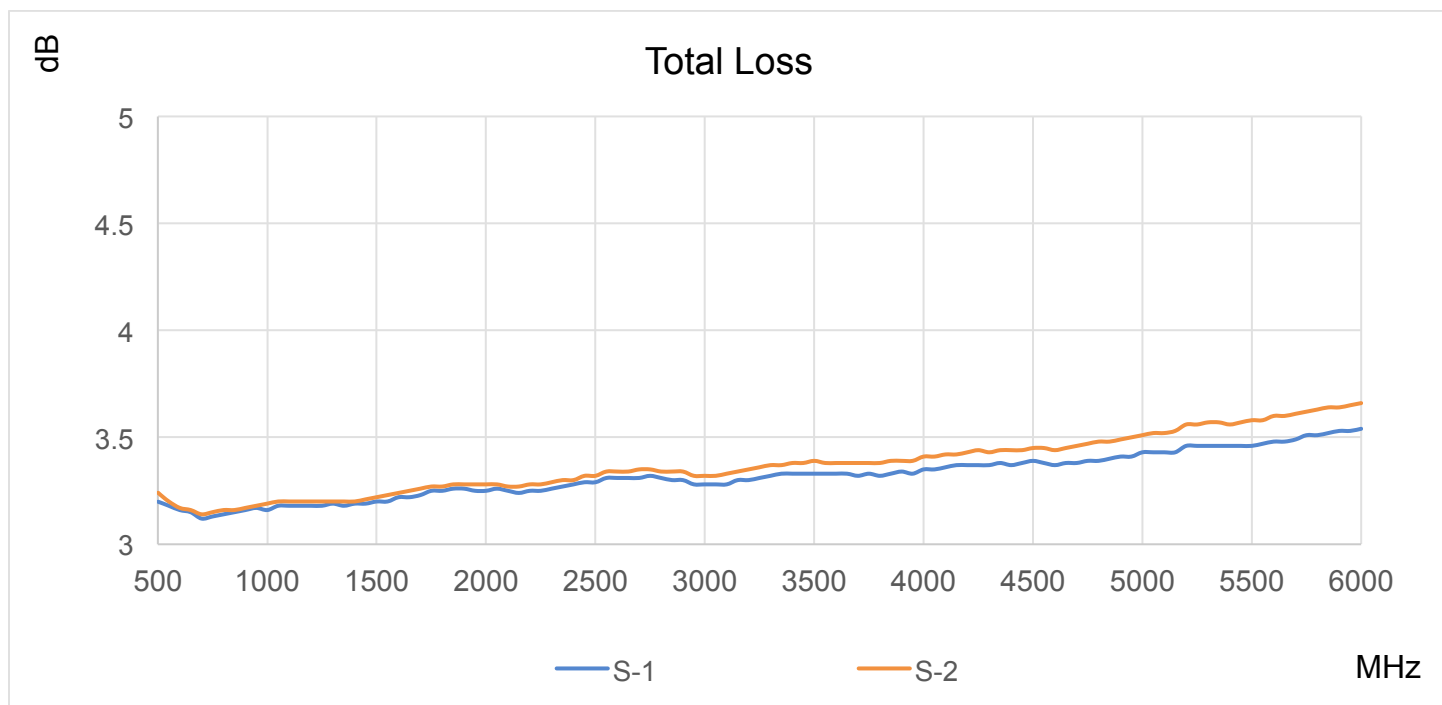
Connector Interface	SMA-Female
Operating Temperature ²	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	3 oz (85 g)
Humidity	10-90% non-condensing
Environment	Indoors Use Only
CAGE Code	87MG8

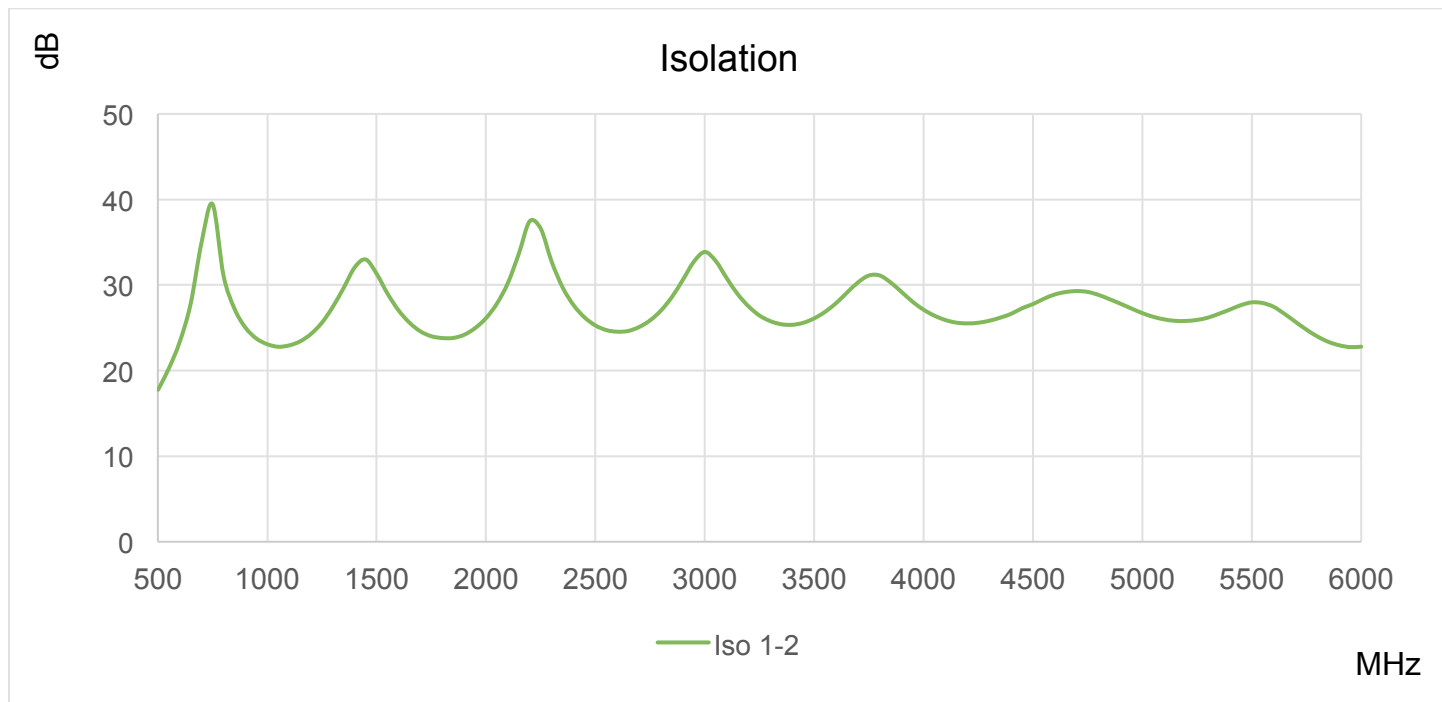
Materials

RoHS Compliant ³	Yes
REACH Compliant ³	Yes
Enclosure	Aluminum
Connectors	Brass, Gold Plated
Contacts	Be Cu, Gold Plated
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 specifications at +25 °C only.
3. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C

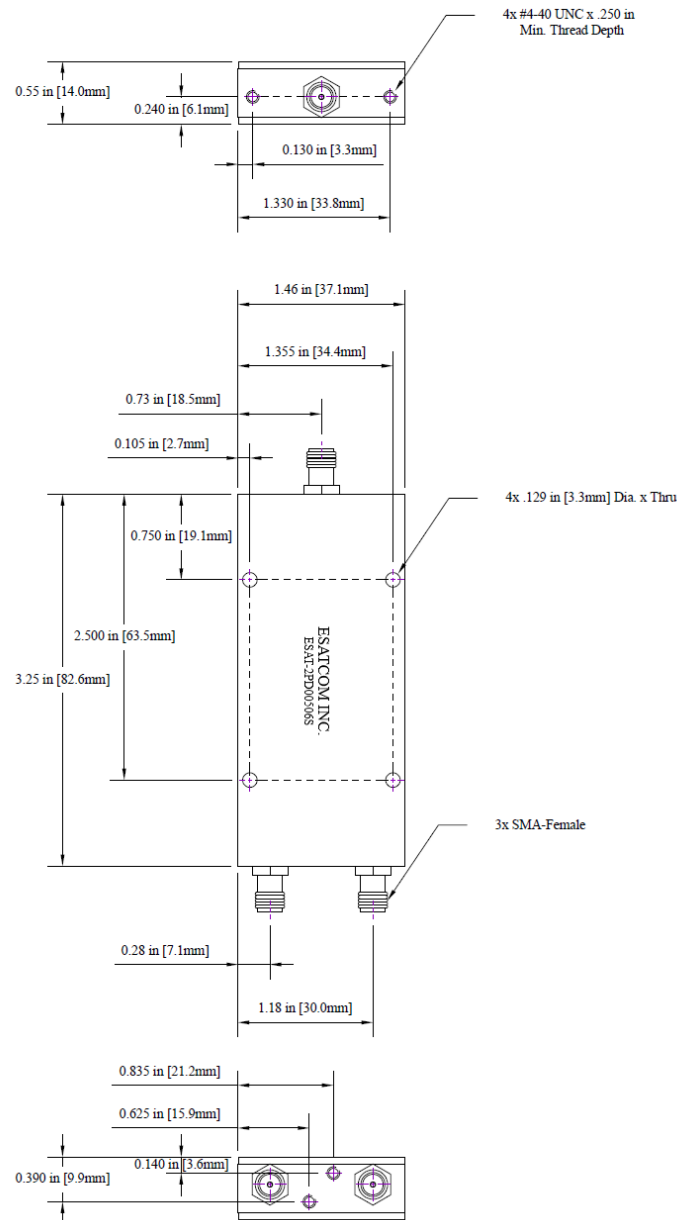




Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)
	Port S	Port 1	Port 2	S-1	S-2	I-2
500	16.6	30.1	29.8	3.2	3.2	17.7
550	18.4	31.3	31.0	3.2	3.2	20.2
600	20.7	32.4	32.0	3.2	3.2	23.4
650	23.6	32.4	32.0	3.2	3.2	27.8
700	27.3	32.8	32.5	3.1	3.1	35.0
750	31.8	33.4	32.8	3.1	3.2	39.5
800	32.5	33.5	32.6	3.1	3.2	31.1
850	29.6	34.8	33.8	3.2	3.2	27.3
900	27.0	36.5	35.0	3.2	3.2	25.0
950	25.4	38.7	36.8	3.2	3.2	23.8
1000	24.3	43.2	39.6	3.2	3.2	23.1
1500	31.7	32.6	33.1	3.2	3.2	31.3
2000	23.1	34.6	34.2	3.3	3.3	26.1
2500	22.0	31.9	30.3	3.3	3.3	25.3
3000	33.2	37.3	47.7	3.3	3.3	33.9
3500	21.8	30.2	29.7	3.3	3.4	26.1
4000	25.9	38.4	39.8	3.4	3.4	27.1
4500	27.4	29.9	31.5	3.4	3.5	27.8
5000	23.8	30.3	45.6	3.4	3.5	26.7
5500	27.0	30.6	29.4	3.5	3.6	28.0
6000	22.4	28.9	24.6	3.5	3.7	22.8

Outline Dimensions



Outline drawing: OL-2066

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

Tolerances on 2-pl decimals: ± 0.03 . 3-pl decimals: ± 0.015 .

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