

Power Divider, 2-way, 0.5-8 GHz, N Female

ESAT-2PD00508N

Description

ESAT-2PD00508N is a 2-way splitter that covers Cellular, PCS and Wi-Max bands. The operation frequency range is 500 MHz to 8 GHz. The product features low loss, high isolation and excellent VSWR. The product has tri-alloy plated brass N female connectors in a rugged aluminum case measuring 4.75 x 1.96 x 0.75 inches. The device is RoHS compliant. The product covers bands from upper UHF to extended Wi-Fi 6E applications.

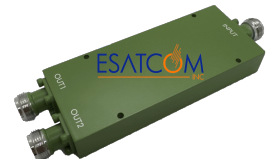


Photo is representative.

Specifications	Min.	Typ.	Max.	Units
Frequency	500	--	8,000	MHz
Impedance	--	50	--	Ohm
Return Loss (Port S)	14	18	--	dB
Return Loss (Ports 1-2)	14	22	--	dB
Insertion Loss (above theoretical 3.01dB)	--	0.5	1.3	dB
Isolation (500-600MHz)	12.5	15	--	dB
(600-8000MHz)	16	21	--	dB
Amplitude Balance	--	0.4	0.6	dB
Phase Balance	--	2	8	Degrees
Input Power (CW) ¹	--	--	20	Watts
Internal Power Dissipation	--	--	1.5	Watts

Mechanical

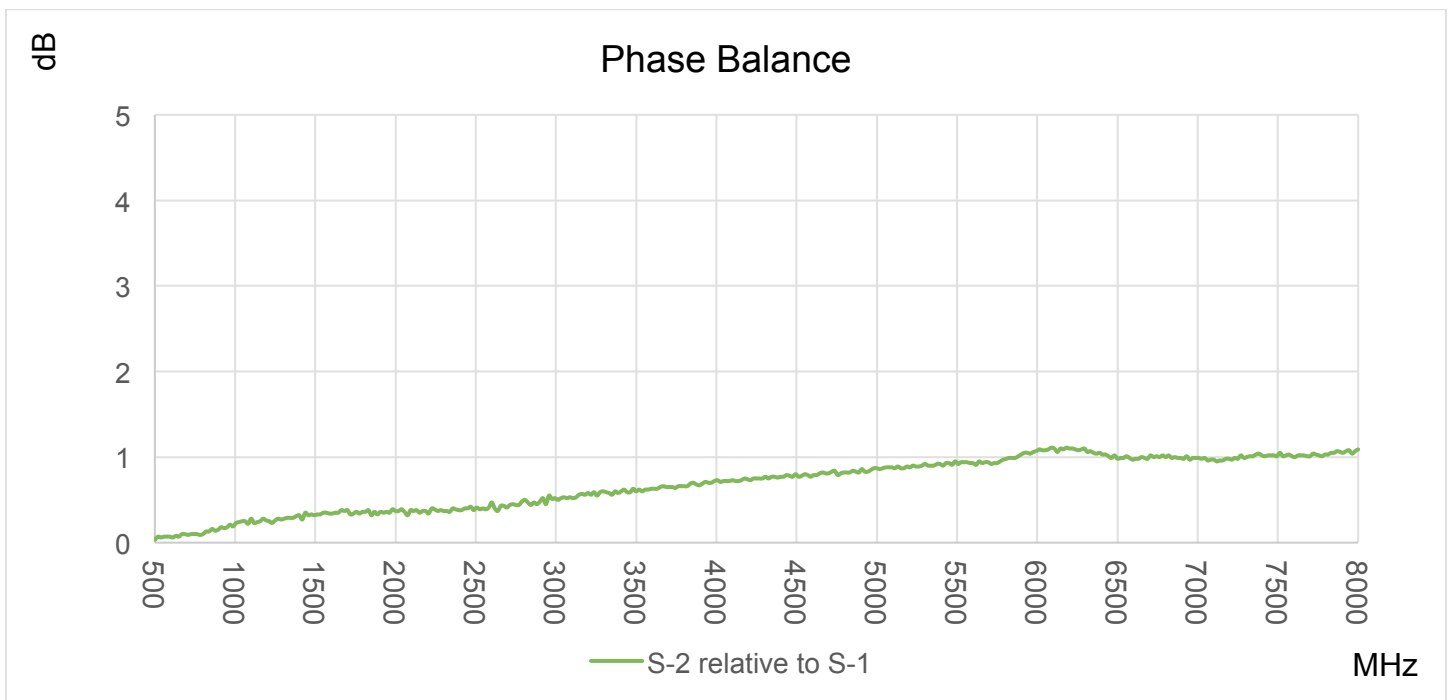
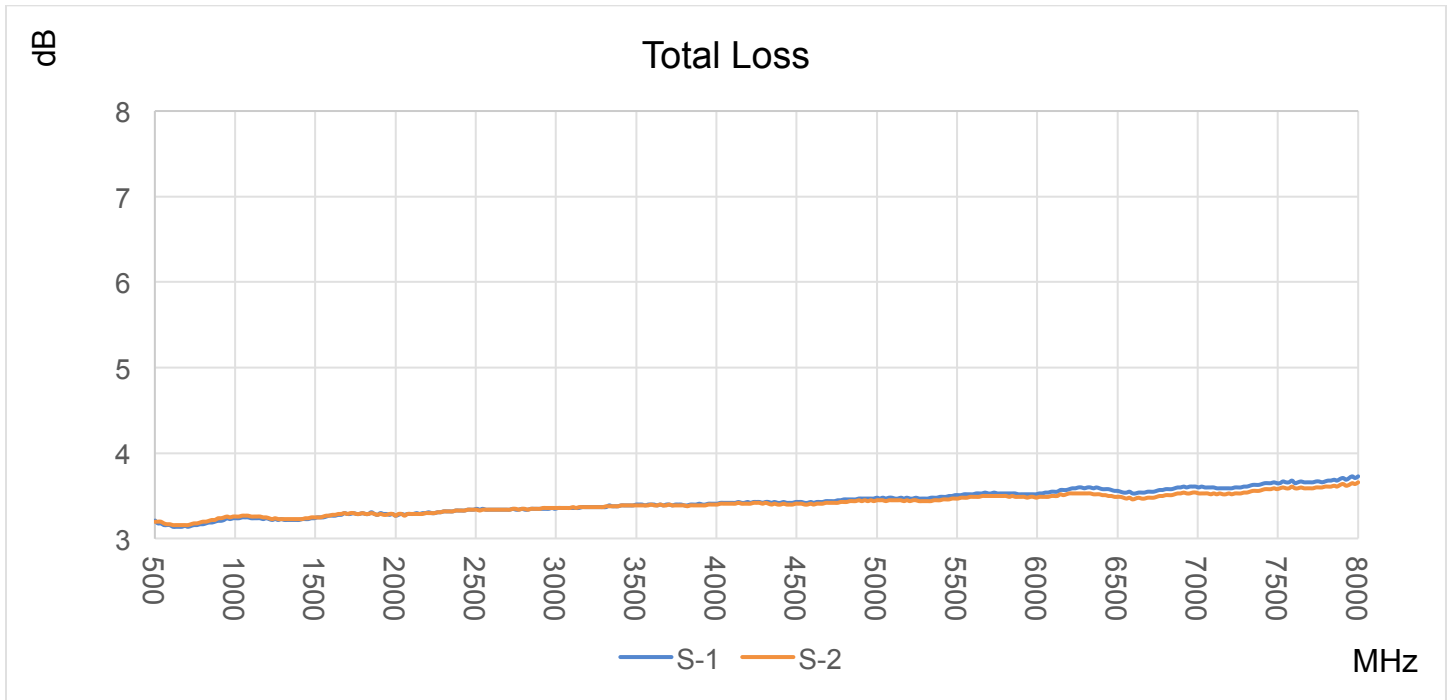
Connector Interface	N-Female
Operating Temperature ²	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	12.8 oz (363 g)
Humidity	10-90% non-condensing
Environment	Indoors Use Only
CAGE Code	87MG8

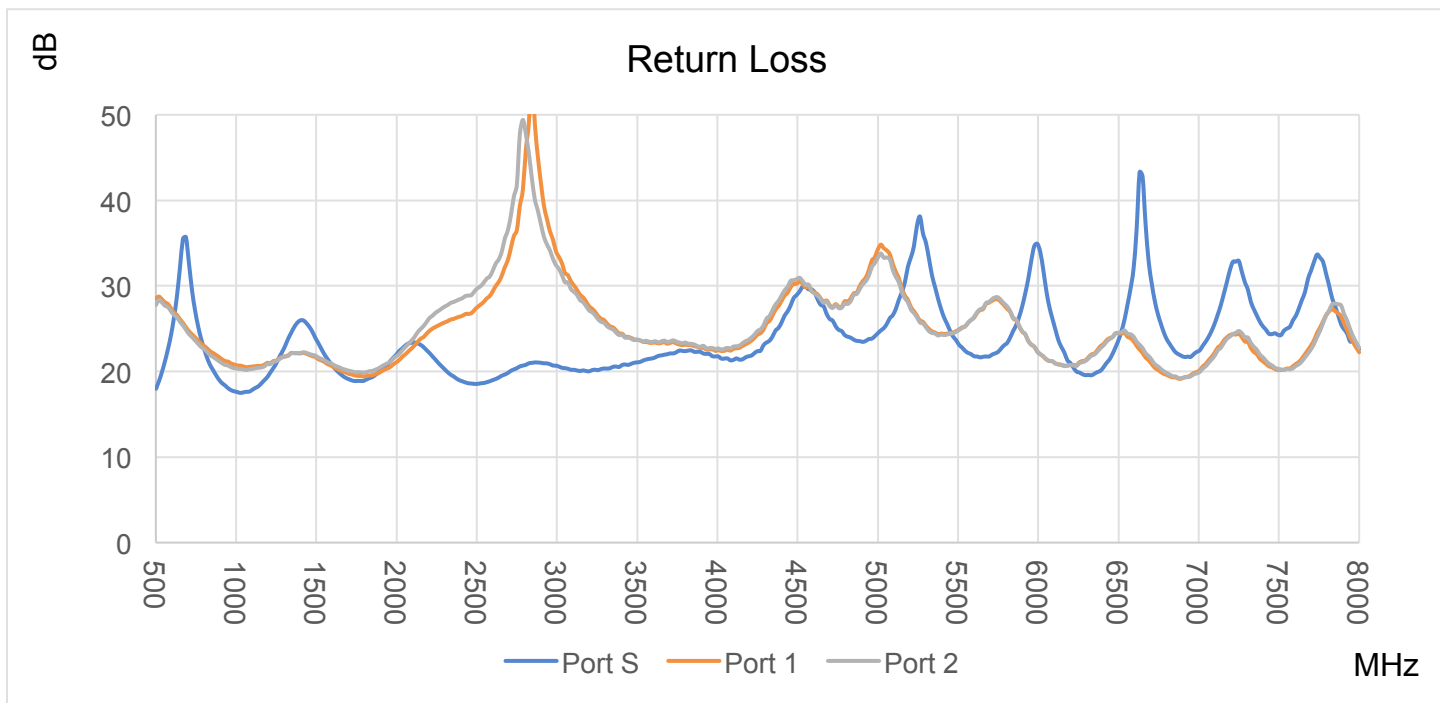
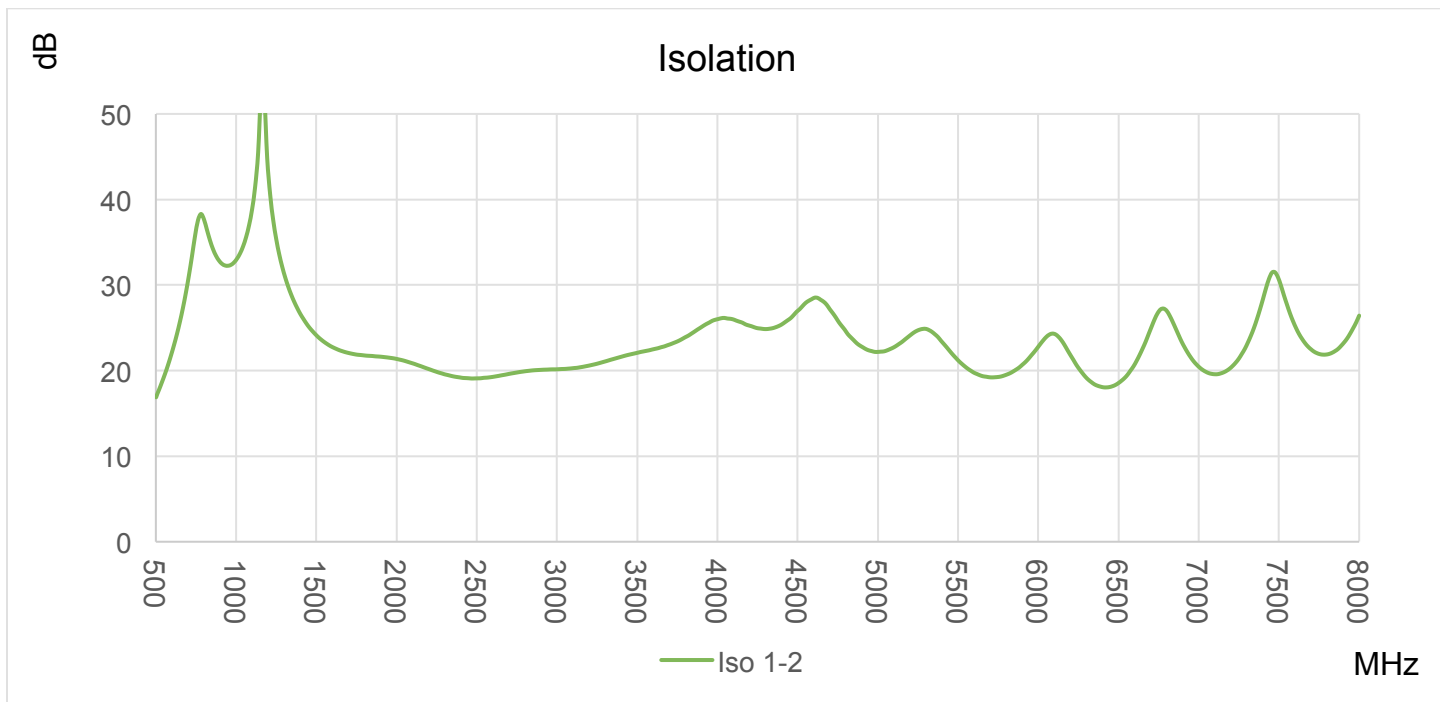
Materials

RoHS Compliant ³	Yes
REACH Compliant ³	Yes
Enclosure	Aluminum
Connectors	Brass, Tri-Alloy
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Green Paint

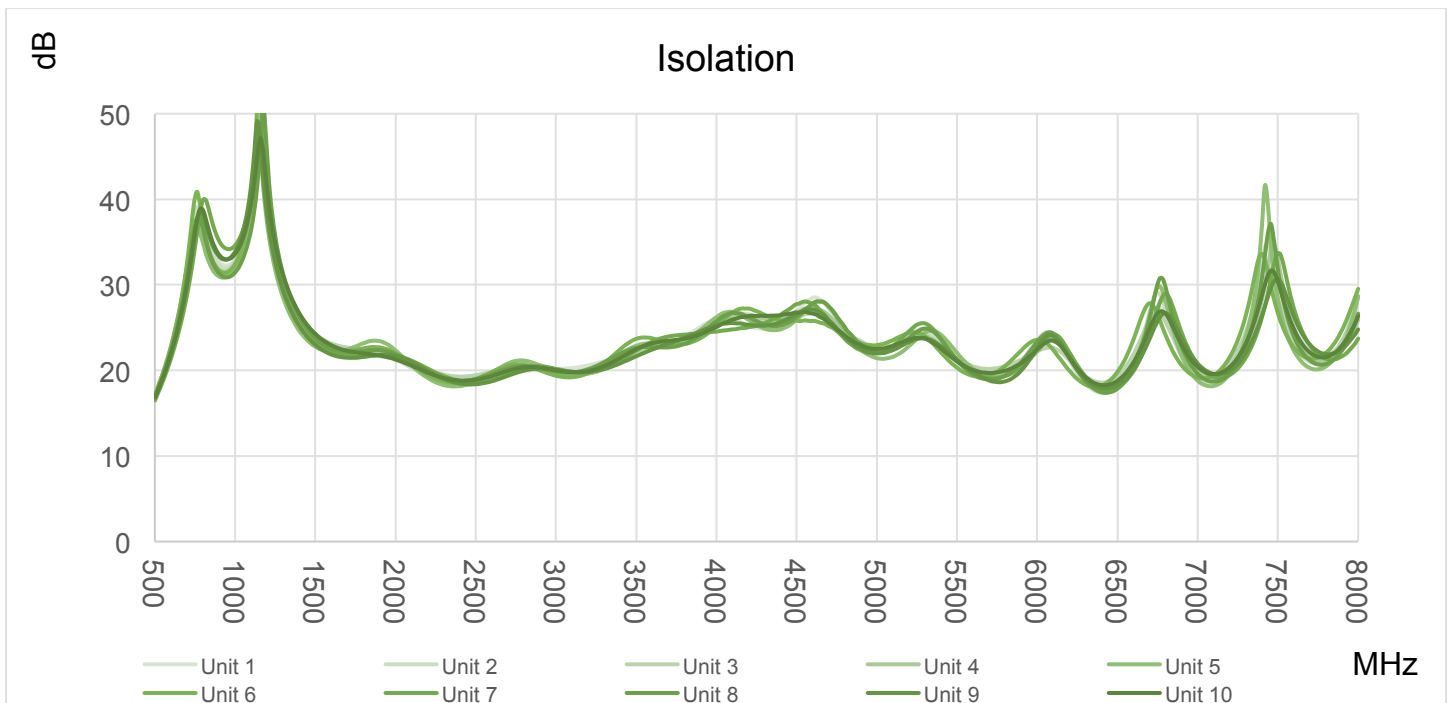
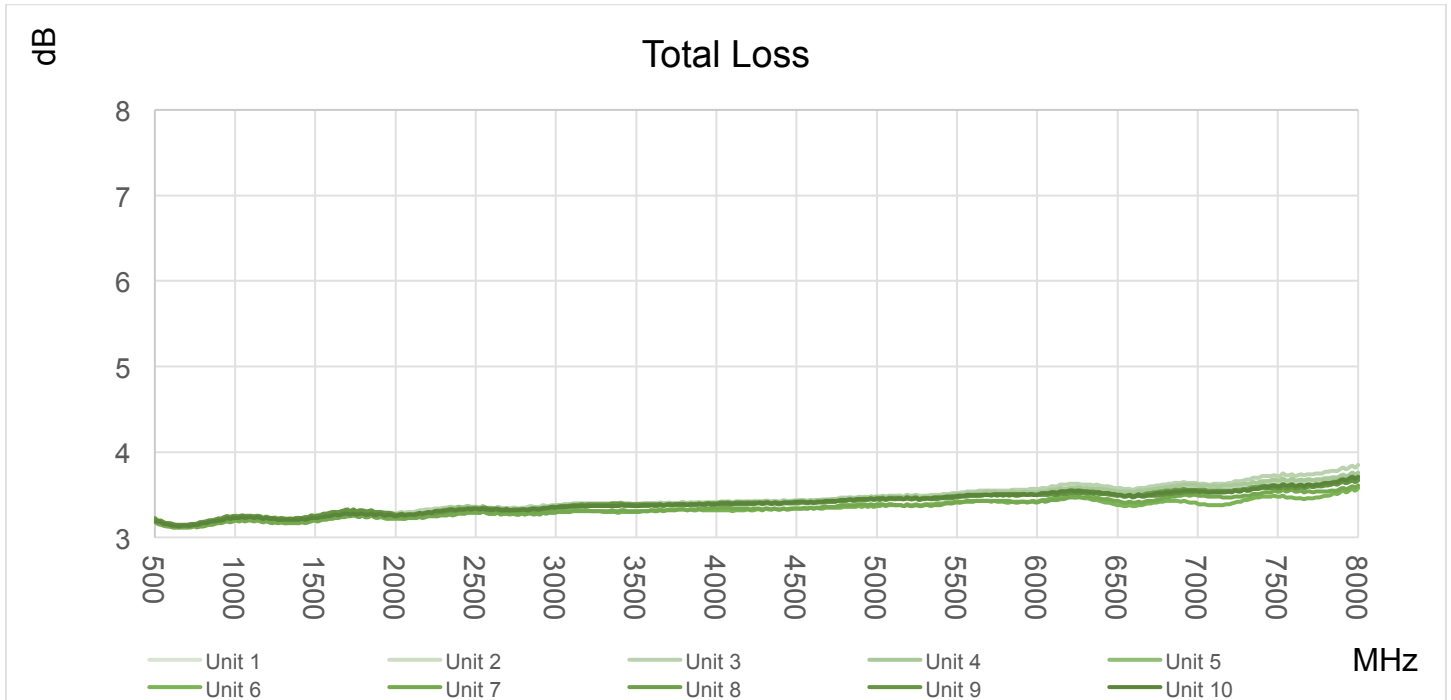
1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
2. Electrical specification at +25 °C only.
3. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C





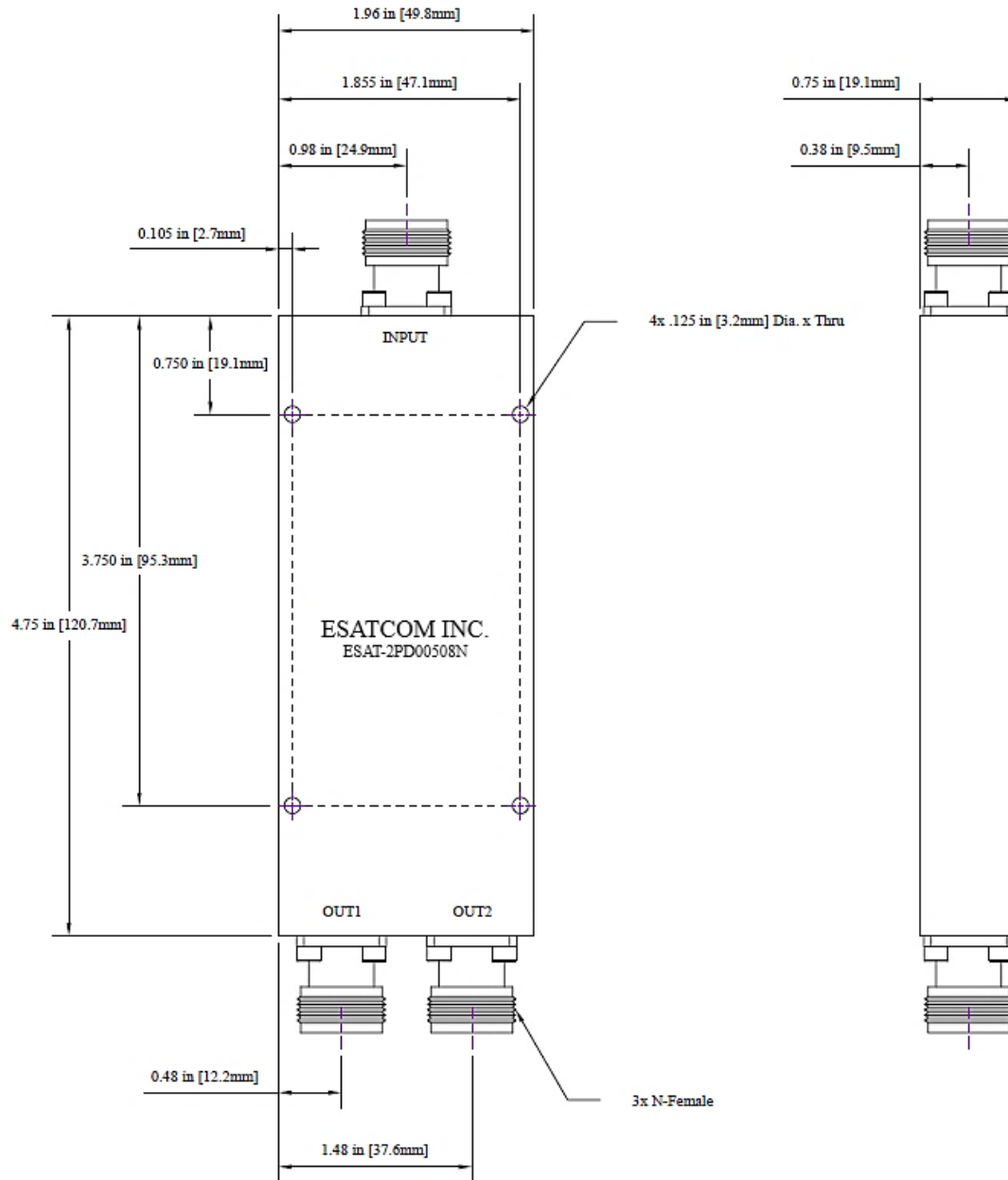
Repeatability in Production



Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)
	Port S	Port 1	Port 2	S-1	S-2	
500	17.6	29.7	29.5	3.2	3.2	16.8
550	20.3	29.6	29.8	3.2	3.2	19.1
600	24.1	28.5	28.8	3.1	3.1	22.0
650	30.2	27.2	27.5	3.1	3.1	25.5
700	33.6	25.8	26.4	3.1	3.1	29.9
750	27.1	24.4	24.8	3.1	3.1	36.7
800	23.2	23.3	23.7	3.2	3.2	40.0
850	20.9	22.2	22.7	3.2	3.2	35.9
900	19.4	21.6	21.9	3.2	3.2	33.6
950	18.5	21.0	21.4	3.2	3.2	32.9
1000	18.2	20.9	21.1	3.2	3.2	33.4
1500	23.0	22.6	22.5	3.2	3.2	22.9
2000	21.9	21.8	21.0	3.2	3.2	21.8
2500	18.6	29.3	28.1	3.3	3.3	18.8
3000	19.1	27.7	28.1	3.3	3.3	19.6
3500	22.2	24.3	23.9	3.3	3.3	23.0
4000	21.7	24.1	23.4	3.3	3.3	24.7
4500	28.6	29.5	28.7	3.3	3.3	26.7
5000	25.4	32.7	31.3	3.3	3.3	21.8
5500	22.8	26.1	24.8	3.4	3.4	20.5
6000	30.2	22.7	22.8	3.4	3.4	23.4
6500	26.4	24.7	23.7	3.3	3.4	19.9
7000	23.9	21.0	20.6	3.4	3.5	20.3
7500	24.6	21.3	20.6	3.4	3.5	27.4
8000	22.2	23.6	22.1	3.5	3.5	26.0

Outline Dimensions



Outline drawing: OL-2085-N

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

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

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