

Power Divider, 2-way, 2-18GHz, N Female

ESAT-2PD0218N

Description

ESAT-2PD0218N is a wideband 2-way in-line power splitter covering the continuous bandwidth of 2 to 18 GHz in a compact enclosure measuring 2.25 x 1.96 x 0.75 inches with type N female connectors. The device is RoHS compliant. Return loss 18dB typical. Insertion loss 0.5dB typical. Isolation 18dB typical. Amplitude balance 0.32dB typical. Phase balance 4 degrees typical.



Photo is representative.

Specifications	Min.	Typ.	Max.	Units
Frequency	2	--	18	GHz
Impedance	--	50	--	Ohm
Return Loss (common port)	12	17	--	dB
Return Loss (split ports)	13	18	--	dB
Insertion Loss Above 3.0 dB	--	0.5	1.5	dB
Isolation	16	18	--	dB
Amplitude Balance (±)	--	0.32	0.75	dB
Phase Balance (±)	--	4	8	Degrees
Input Power (CW) ¹	--	--	30	Watts

Mechanical

Connector Interface	N-Female
Operating Temperature ²	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	7.2 oz (204 g)
Humidity	10-90% non-condensing
Environment	Indoor Use Only

Materials

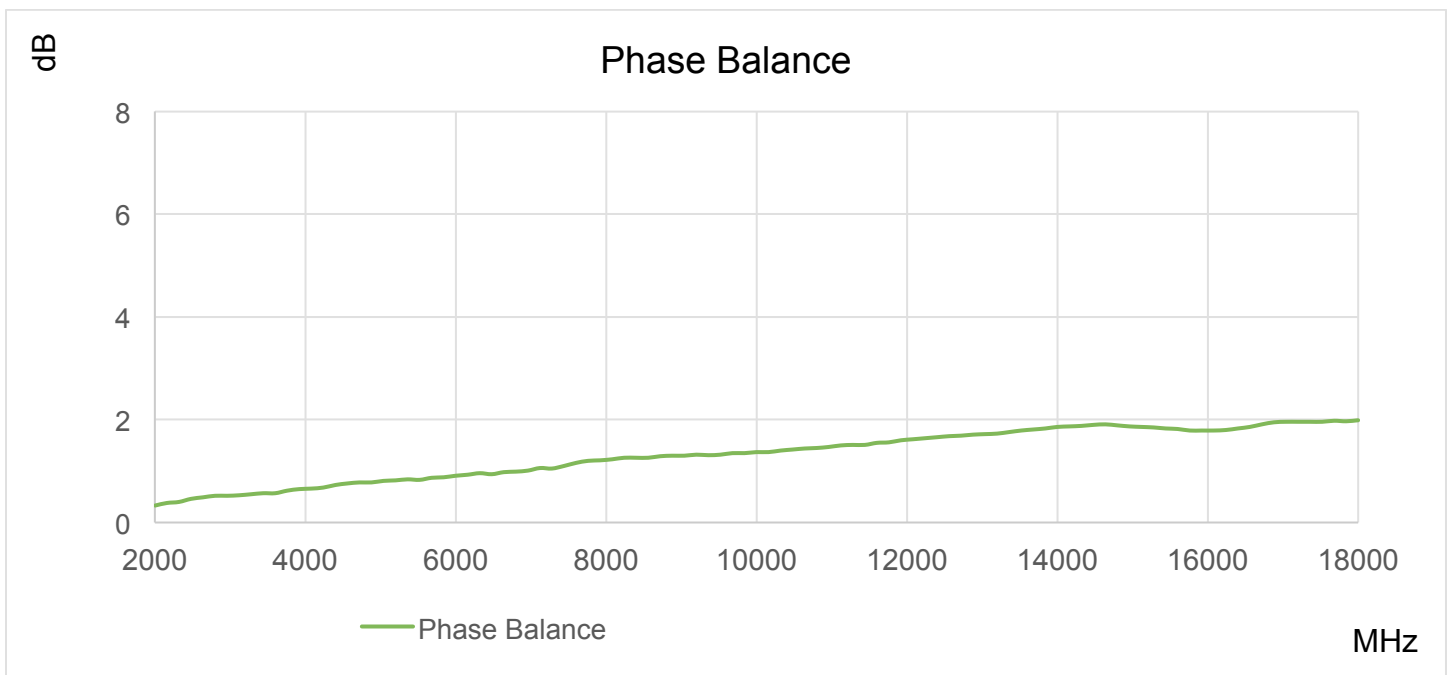
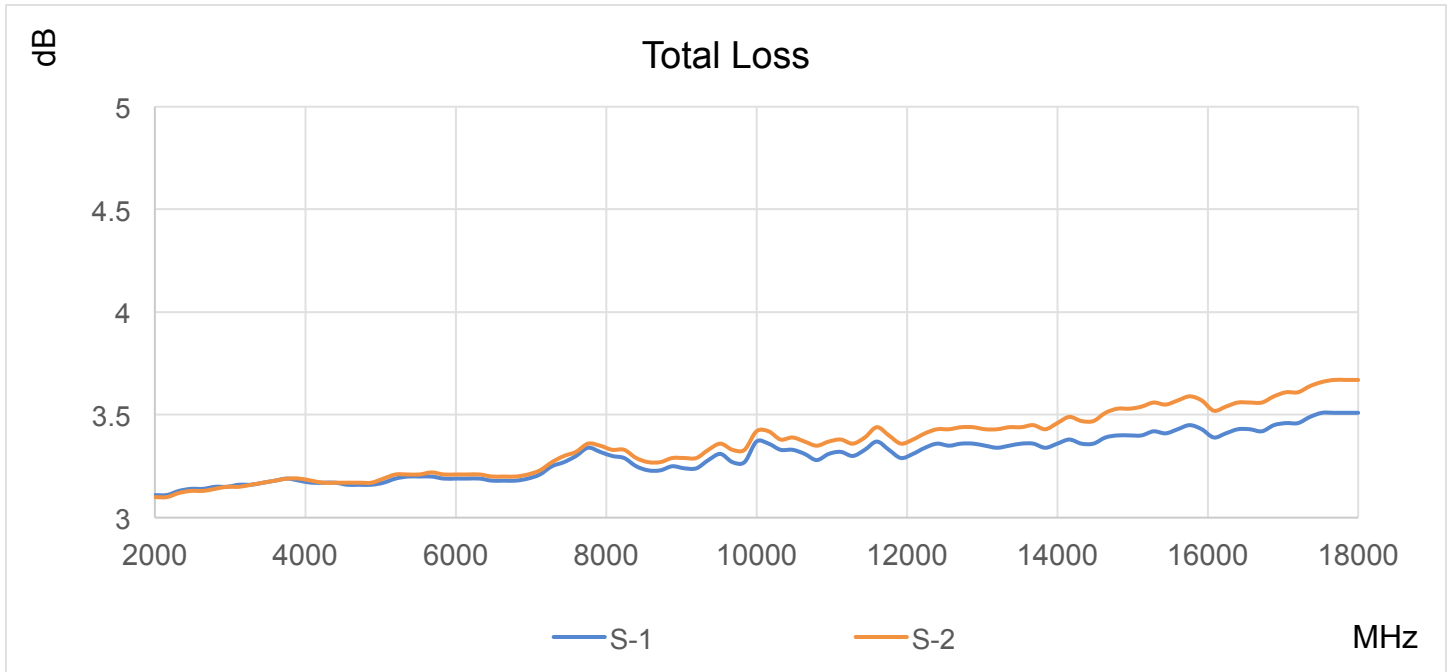
RoHS Compliant ³	Yes
REACH Compliant ³	Yes
Enclosure	Aluminum
Connectors	Stainless Steel
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Green Paint

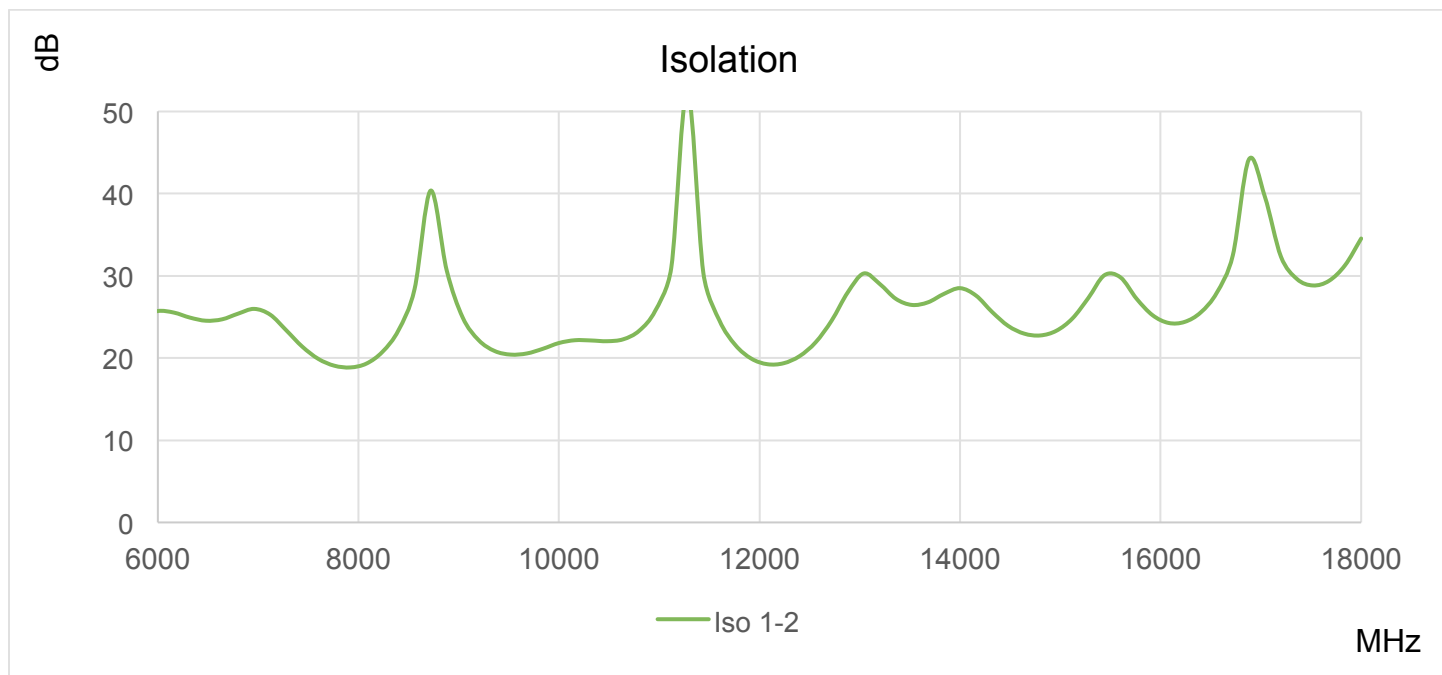
1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.

2. Electrical specification at +25 °C only.

3. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C

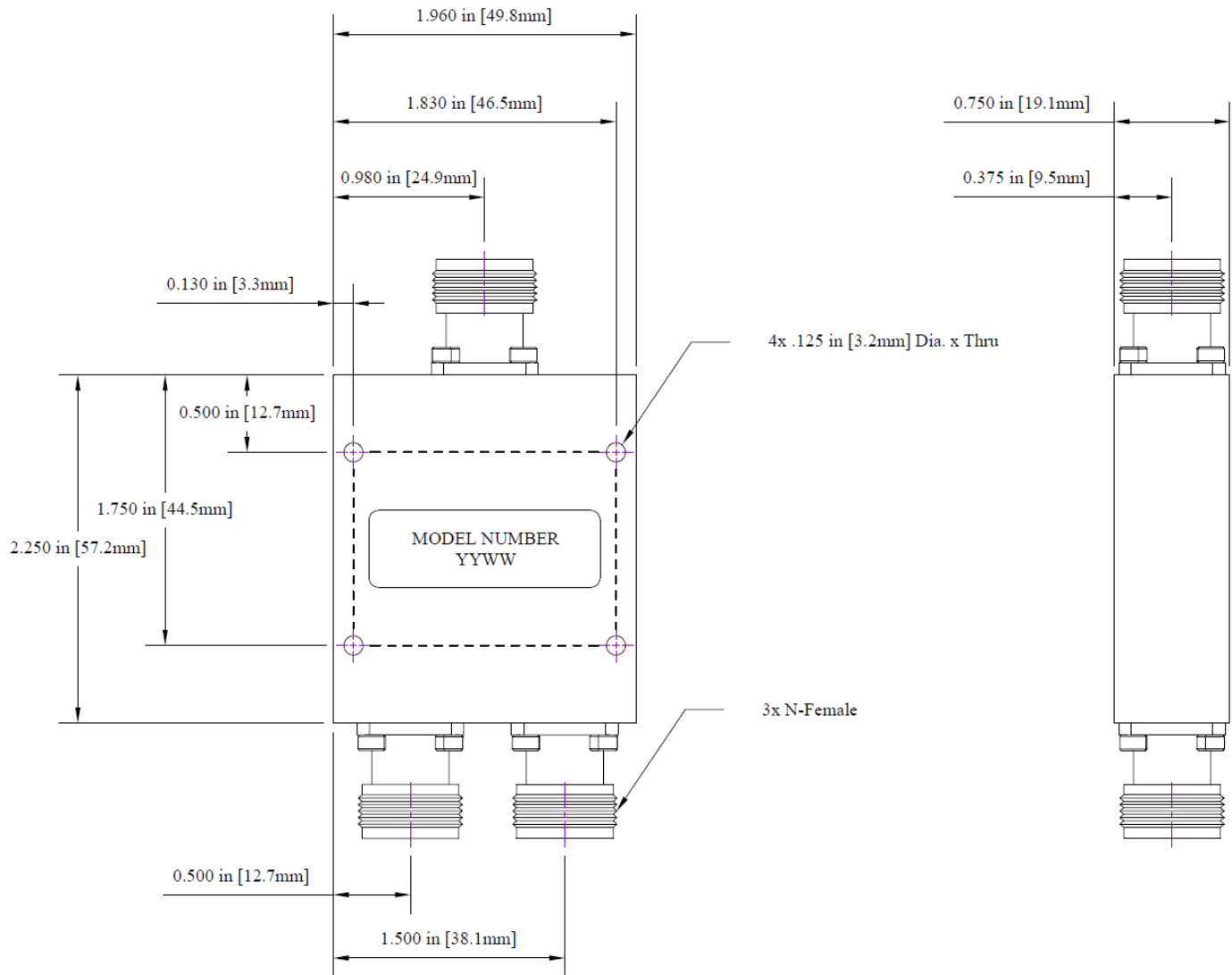




Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)
	Port S	Port 1	Port 2	S-1	S-2	
2000	27.9	24.5	24.9	3.1	3.1	24.8
2800	21.9	32.1	31.2	3.2	3.1	20.3
3600	19.8	24.6	23.8	3.2	3.2	24.3
4400	23.6	39.4	39.2	3.2	3.2	22.4
5200	29.7	25.4	24.7	3.2	3.2	21.3
6000	25.8	32.6	28.6	3.2	3.2	25.7
6800	41.3	31.5	27.3	3.2	3.2	25.4
7600	17.3	29.2	30.0	3.3	3.3	19.9
8400	24.3	52.4	40.6	3.3	3.3	23.4
9200	20.1	23.4	22.6	3.2	3.3	22.2
10000	18.5	25.5	25.4	3.4	3.4	21.8
10800	36.1	26.1	27.2	3.3	3.4	23.3
11600	19.9	23.9	26.1	3.4	3.4	24.6
12400	22.5	34.9	38.1	3.4	3.4	20.2
13200	33.6	35.9	30.9	3.3	3.4	29.0
14000	24.3	32.5	28.0	3.4	3.5	28.5
14800	26.4	28.5	26.5	3.4	3.5	22.7
15600	18.7	23.4	24.7	3.4	3.6	29.8
16400	40.8	24.7	26.5	3.4	3.6	25.5
17200	19.2	19.2	19.6	3.5	3.6	32.3
18000	20.6	22.9	23.5	3.5	3.7	34.5

Outline Dimensions



Outline drawing: OL-2I82-N

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

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

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or documentation of the part, in order to implement improvements. Esatcom Inc. reserves the right to make such changes as required without notice. Unless otherwise stated, all specifications and dimensions are nominal. Esatcom Inc. does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Esatcom Inc. does not assume any liability arising out of the use of any part of documentation. This document gives only a description of the product(s) and shall not form part of any contract. Please contact a Esatcom Inc. Applications Engineer for the most current specification drawing.