MAPD-011018

2-Way 90° Power Splitter
5 - 250 MHz

Rev. V3

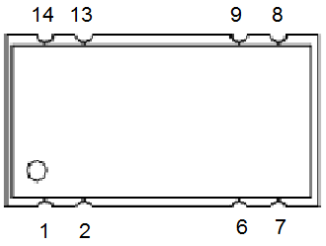
Features

- 2-Way 90°
- Surface Mount Package
- Available on Tape & Reel
- 260ºC Reflow Compatible
- RoHS Compliant, Lead-Free
- Excellent Temperature Stability
- Suitable for all CATV, Broadband and FTTx Applications

Description

The MAPD-011018 is a 2 way 90º power splitter in a surface mount package. Ideally suited for all broadband CATV applications.

Functional Block Diagram



Pin Configuration

Pin #	Function	Pin #	Function
1	Input	7	Output 1(0°)
2 - 6, 9 - 14	Ground	8	Output 2(+90°)

Electrical Specifications: Freq. = 5 - 250 MHz, T_A = 25°C, Z_0 = 75 Ω, P_{IN} = 0 dBm

Parameter	Test Frequency (MHz)	Units	Min	Typ	Max
Insertion Loss (pin 1 - pin 7)	5 - 85 85 - 250	dB	—	1.5 1.2	1.9 1.9
Insertion Loss (pin 1 - pin 8)	5 - 85 85 - 250	dB	—	1.16 1.02	1.4 3.5
Amplitude Balance	5 - 85 85 - 250	dB	—	0.4 0.2	±0.8 ±2.9
Phase Balance	5 - 85 85 - 100 100 - 250	°	—	90.0 94.3 101.8	±3 ±9 ±17
Input Return Loss (pin 1)	5 - 85 85 - 250	dB	9 9	10.3 11.1	—
Output Return Loss (pin 7)	5 - 85 85 - 250	dB	6 6	7.7 16.9	—
Output Return Loss (pin 8)	5 - 85 85 - 250	dB	14 4	16.2 20.5	—
Isolation (pin 7 - pin 8)	5 - 85 85 - 250	dB	15 10	19.4 17.9	—

Ordering Information

Part Number	Description
MAPD-011018	400 piece reel
MAPD-011018-TB	sample board

Absolute Maximum Ratings

Parameter	Absolute Maximum
Input RF Power	250 mW
DC Current	200 mA
Operating Temperature	-40°C to +85°C

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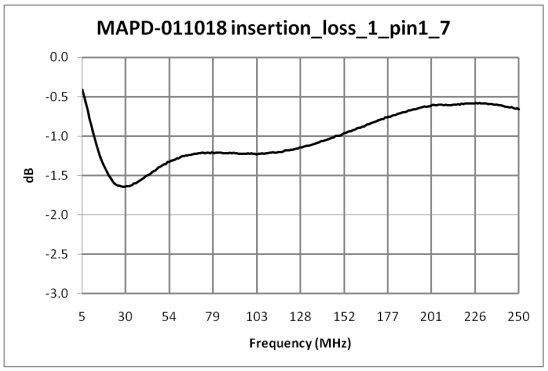
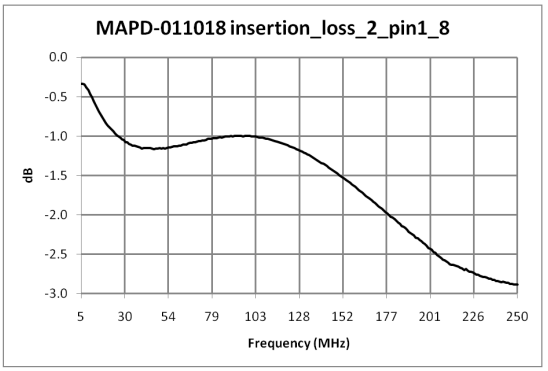
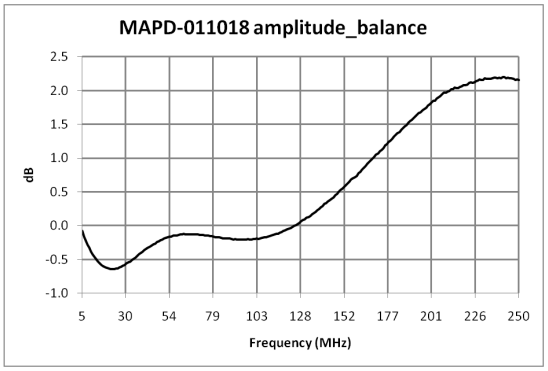
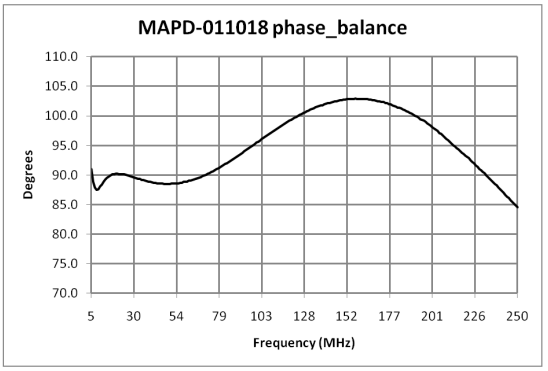
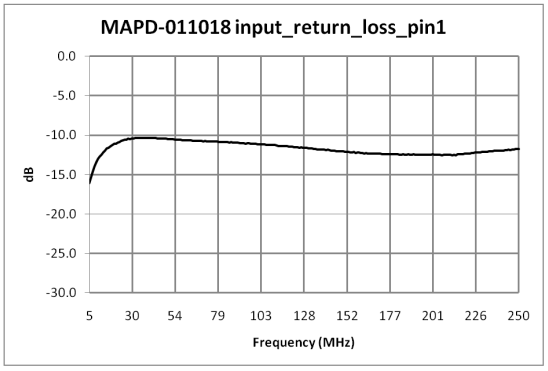
Typical Performance Curves: T_A = 25°C, Z_0 = 75 Ω, P_{IN} = 0 dBm

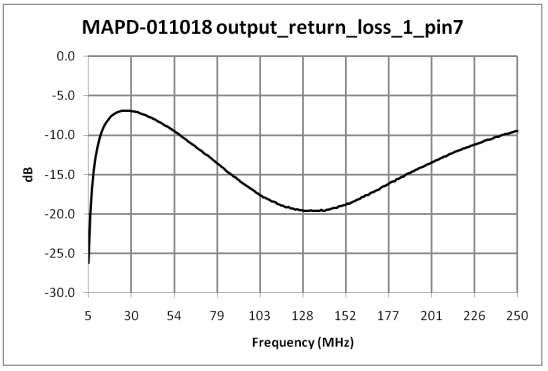


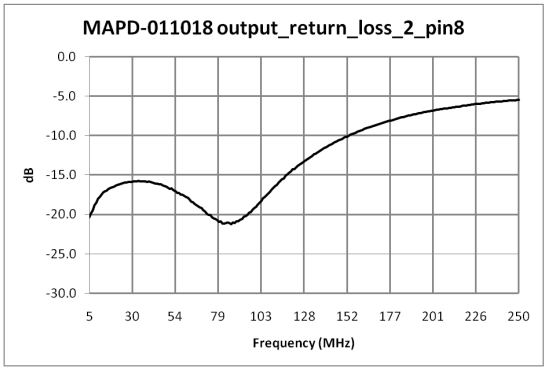


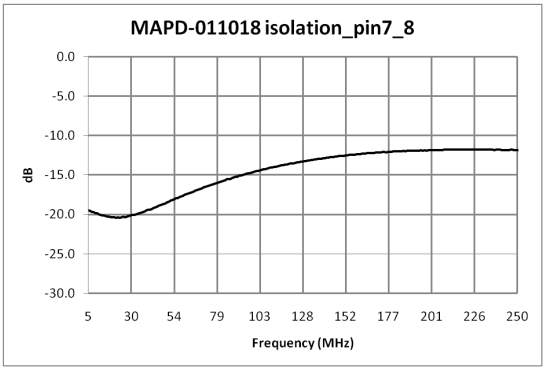












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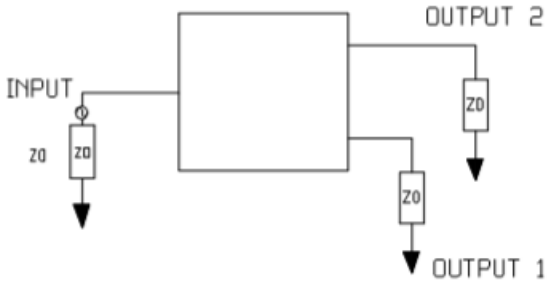
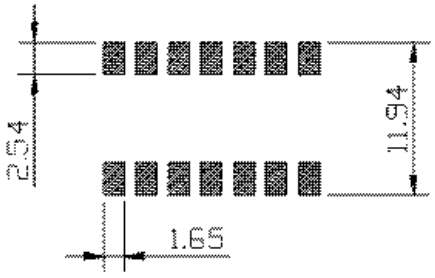
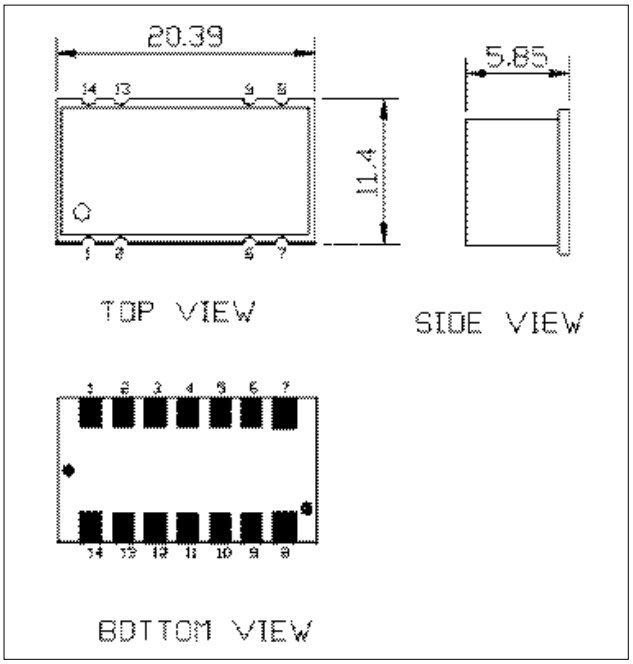
Application Schematic



Recommended Footprint



Outline Drawing



1. Dimensions in mm.
2. Tolerance: ±0.2 mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Plating finish: ENIG

Tape & Reel Information

Parameter	Units	Value
Qty per reel	—	400
Reel Size	mm	330
Tape Width	mm	44
Pitch	mm	20
Ao	mm	21
Bo	mm	12
Ko	mm	6.40
Orientation	—	F30
Reference Application Note ANI-019 for orientation		

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