

MPD1020W2

2 way Power Splitter/Combiners



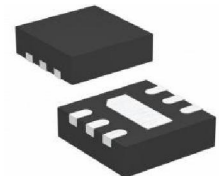
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Applications

1. GNSS Antenna
2. Multi-frequency signal combined
3. GSM, CDMA and LTE

Features

1. Low Insertion Loss 0.5dB typ based on IPD technology
2. Based on IPD technology
3. High isolation
4. Frequency wide Band
5. AECQ-200 qualified



Description

The MPD1020W2 is a low cost, high performance two ways power splitters in an easy to use surface mount package. It is ideal for multi -frequency signal combined, indoor antenna distribution system and multi-frequency Small Cell & Pico. MPD1020W2 is Based on IPD technology which possess excellent electrical and mechanical stability. All components are 100% RF tested.

Electrical Specifications

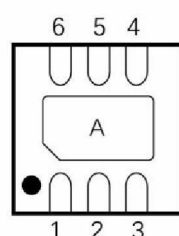
Table 1. MPD1020W2 Electrical Specifications

Item	Min.	Type.	Max.	Unit
Frequency Range	1000		2000	MHz
Insertion Loss (above 3 dB)		0.5	1.2	dB
Isolation	15	20		dB
Amplitude Unbalance	-0.5	0.2	+0.5	
Phase Unbalance	-5	2	+5	Deg.
VSWR (Port S)		1.25	1.50	:1
VSWR (Port 6,2)			1.35	:1
Operating Temp.	-55		+105	°C
Power Input (sum port)			1	Watt

All the above data are based on specified demo board and tested in 25° environment.

Port Configurations

Figure 1. MPD1020W2 Port Configurations (Top View)



Pin #	Connection
1/3/5/A	GND
2	In
4/6	Out

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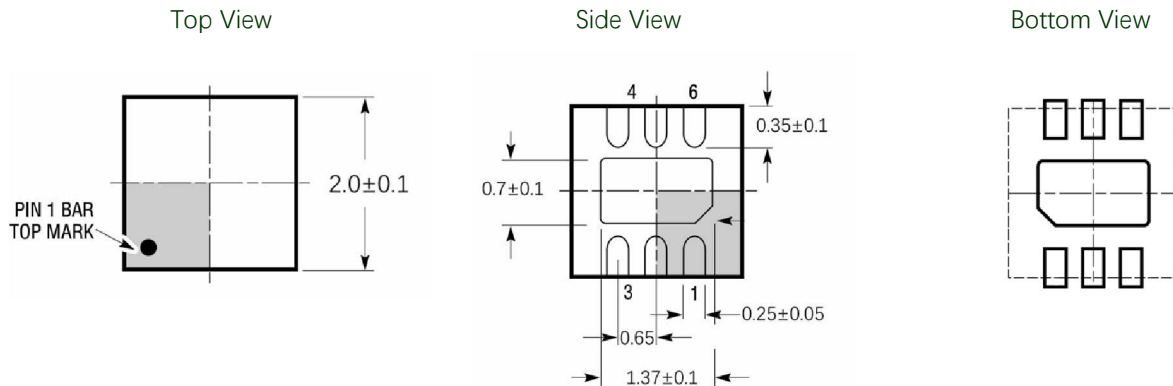
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Outline Drawing

Figure 2. MPD1020W2 Outline Drawing



Typical Performance

Figure 3. MPD1020W2 Insertion Loss

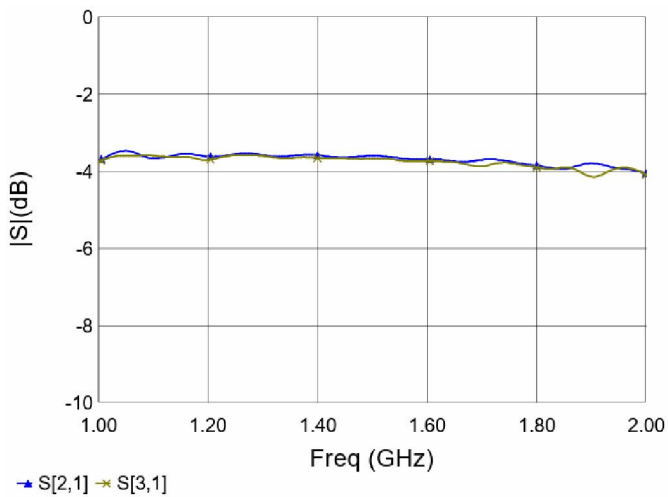


Figure 4. MPD1020W2 Return Loss (S11)

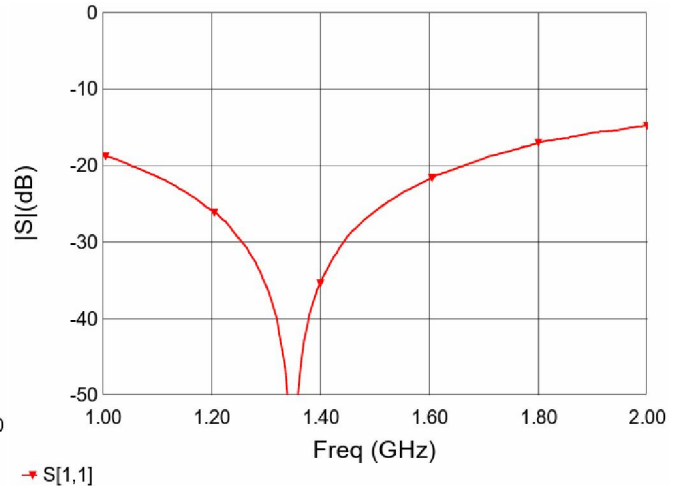


Figure 5. MPD1020W2 Return Loss (S22)

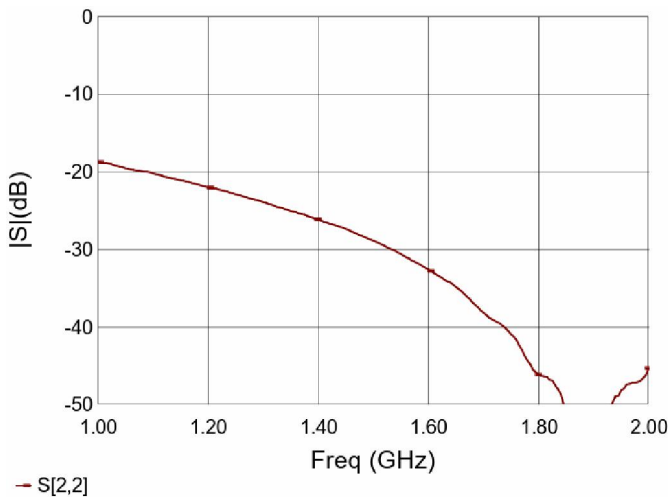
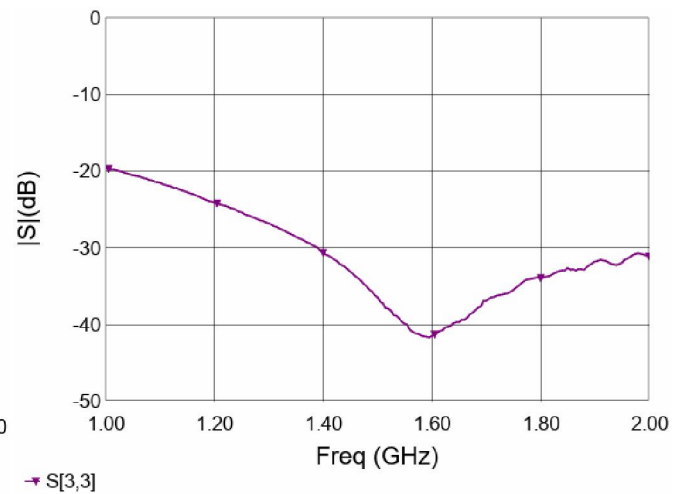


Figure 6. MPD1020W2 Return Loss (S33)



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Figure 7. MPD1020W2 Isolation

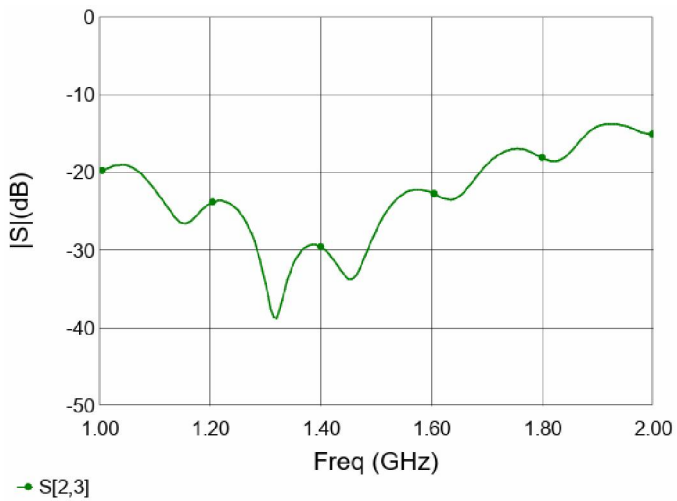
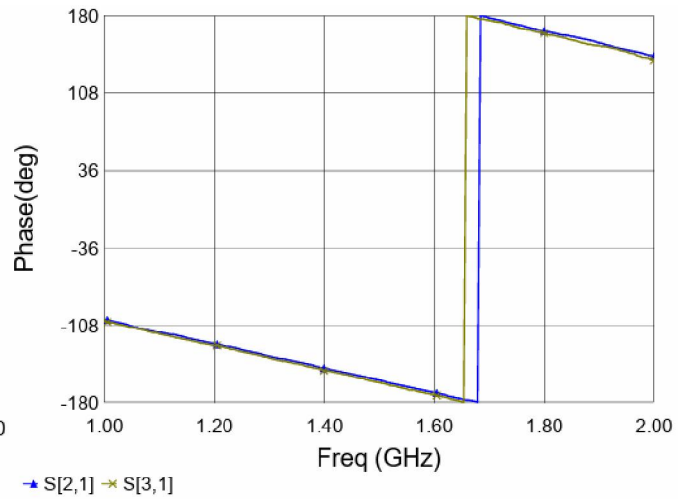
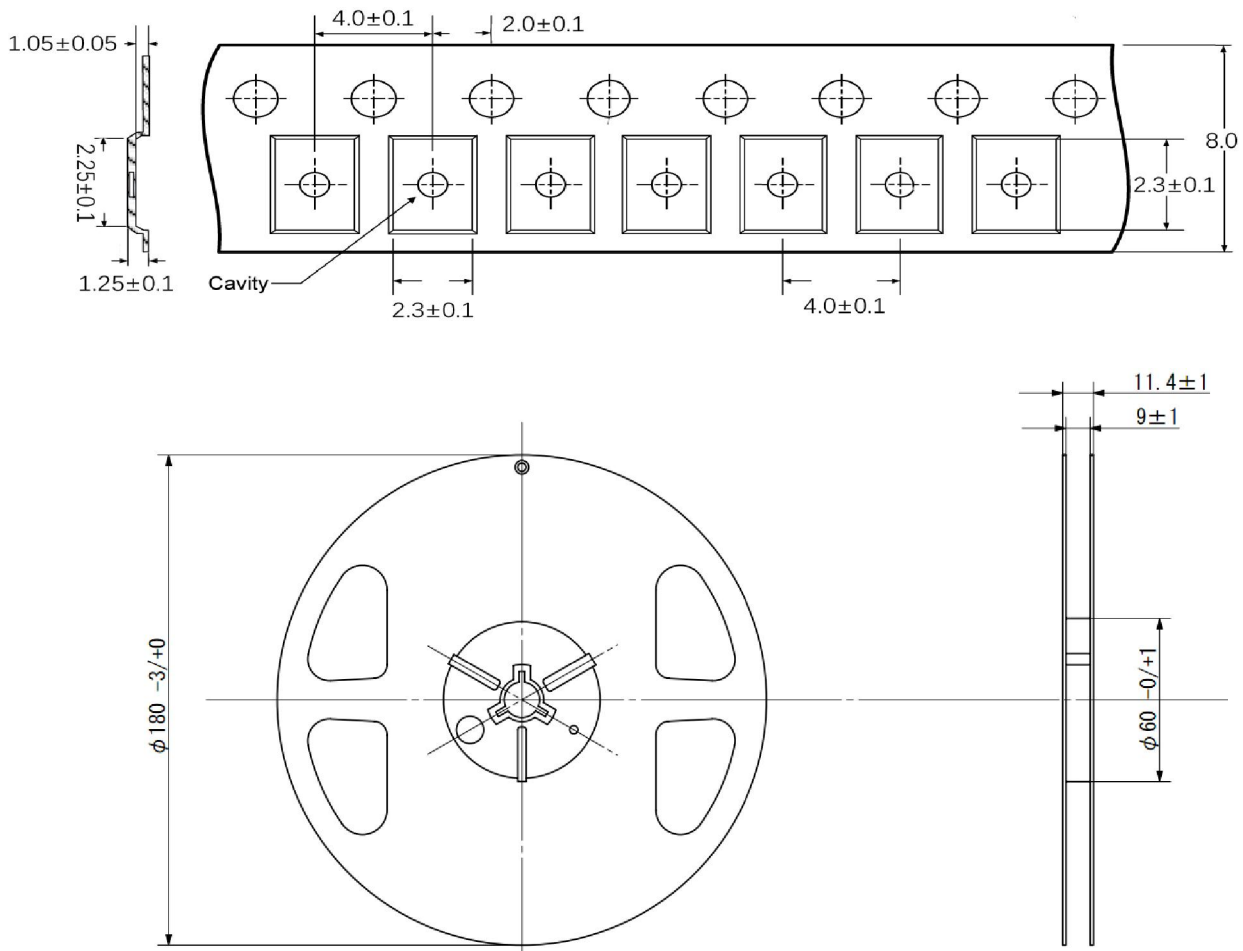


Figure 8. MPD1020W2 Phase



Packaging and Ordering Information

Figure 9. MPD1020W2 Packaging Specifications



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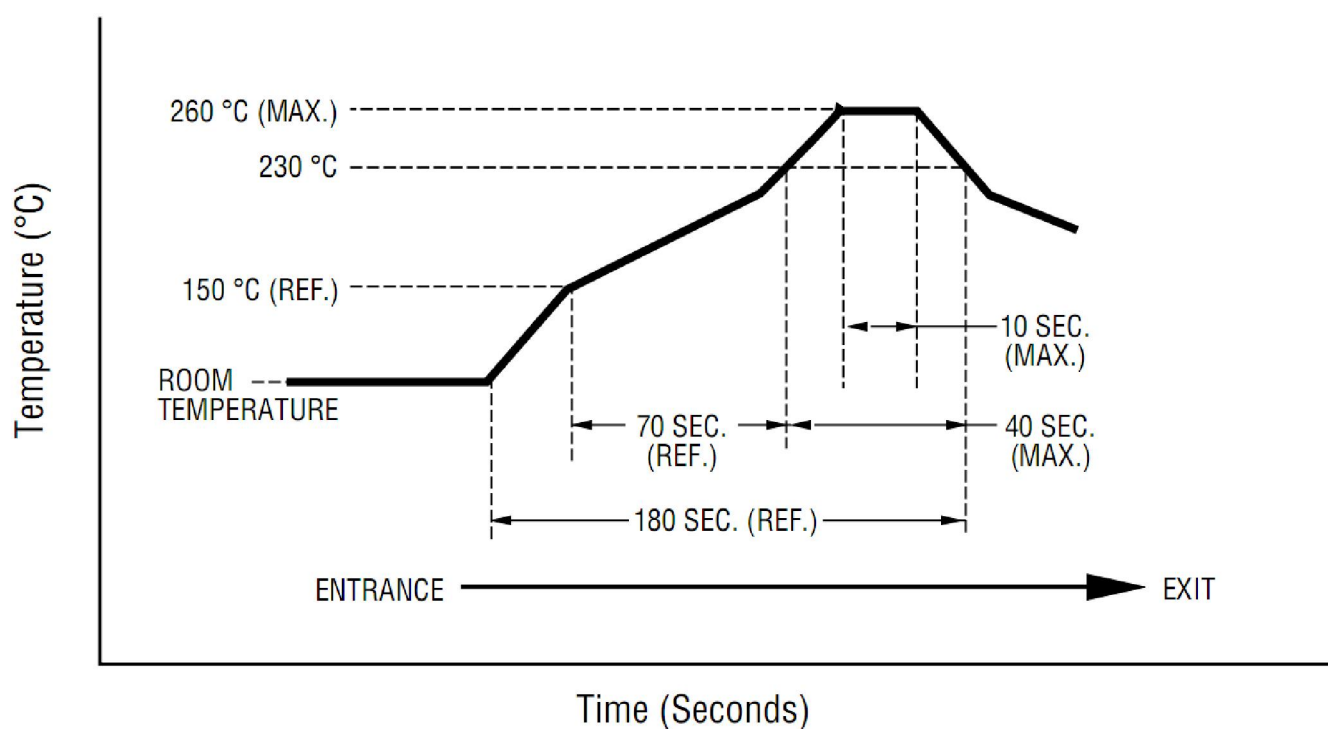
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Table 2. MPD1020W2 Ordering Information

Device	Package	Reel	Shipping
MPD1020W2	2*2mm	7"	4000/Reel

Recommended Reflow Solder Profile

Figure 10. MPD1020W2 Recommended Reflow Solder Profile



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Revision	Description	Date
Rev1	Preliminary	2023/10/28
Rev2	Packaging	2023/11/21
Rev2	Typical Performance, Packaging	2024/03/15

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