

MPD0780W2

2 way Power Splitters/Combiners



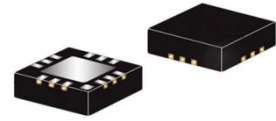
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Applications

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

Features

1. Low Insertion Loss 1.5dB typ based on IPD technology
2. Based on IPD technology
3. High isolation
4. Frequency wide Band
5. AEC-Q200 qualified



Description

The MPD0780W2 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. MPD0780W2 is Based on IPD technology which possess excellent electrical and mechanical stability. All components are 100% RF tested.

Electrical Specifications

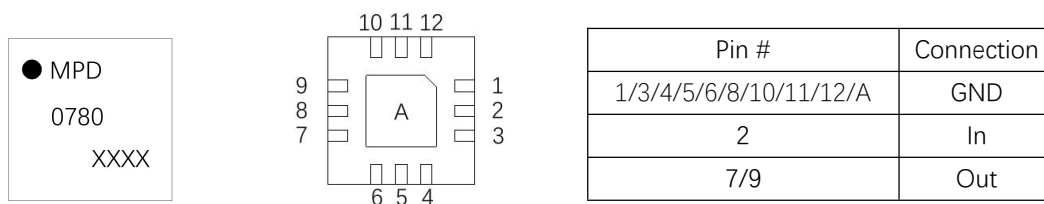
Table 1. MPD0780W2 Electrical Specifications

Item	Min.	Type.	Max.	Unit
Frequency Range	700		8000	MHz
Isolation	10	20	40	dB
Insertion Loss		0.75	1.5	dB
Phase Unbalance	-5	3	+5	Deg.
Amplitude	-1	0.8	+1	dB
Return Loss	10	18		dB
Operating Temp.	-55		+105	°C
Power			2	W

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

Port Configurations

Figure 1. MPD0780W2 Port Configurations (Bottom View)



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Typical Performance (25°C, 700-8000MHz)

Figure 2. MPD0780W2 Return Loss(S11)

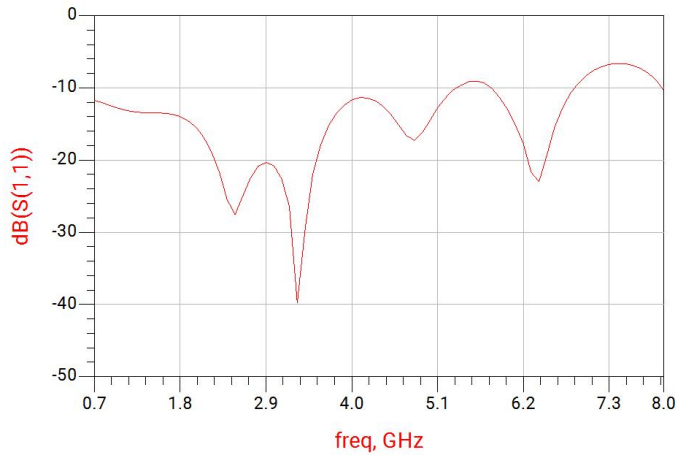


Figure 3. MPD0780W2 Return Loss (S22)

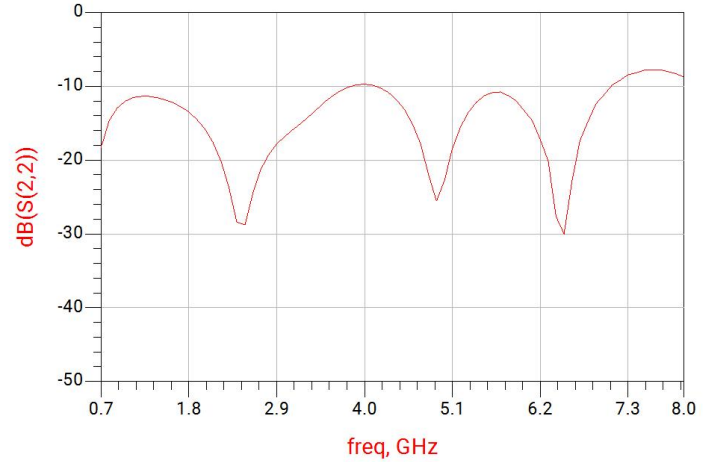


Figure 4. MPD0780W2 Return Loss (S33)

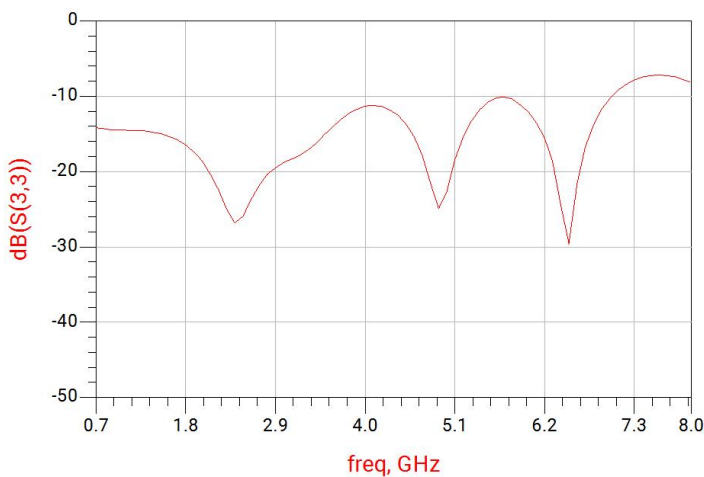


Figure 5. MPD0780W2 Insertion Loss (S21)

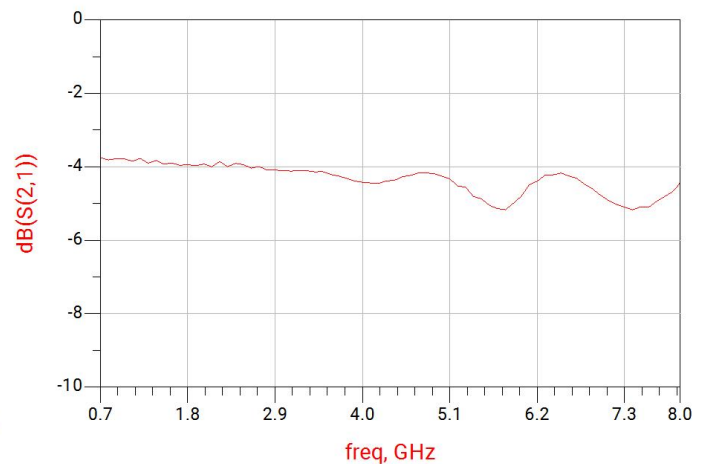


Figure 6. MPD0780W2 Insertion Loss (S31)

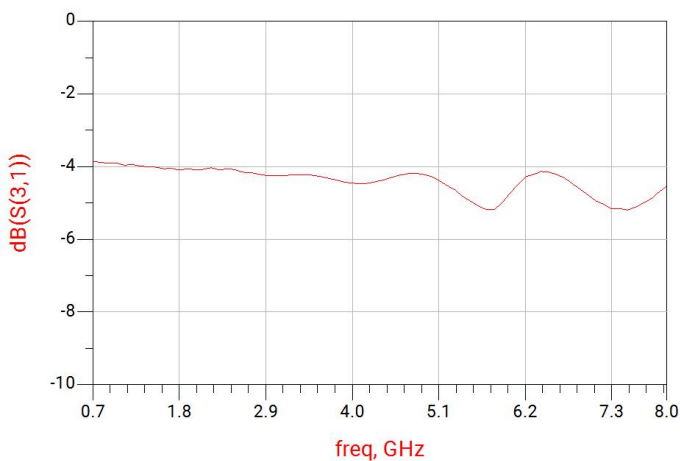
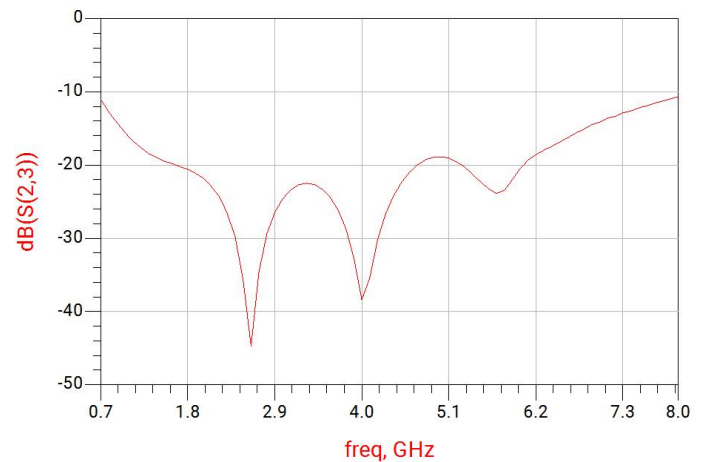


Figure 7. MPD0780W2 Isolation



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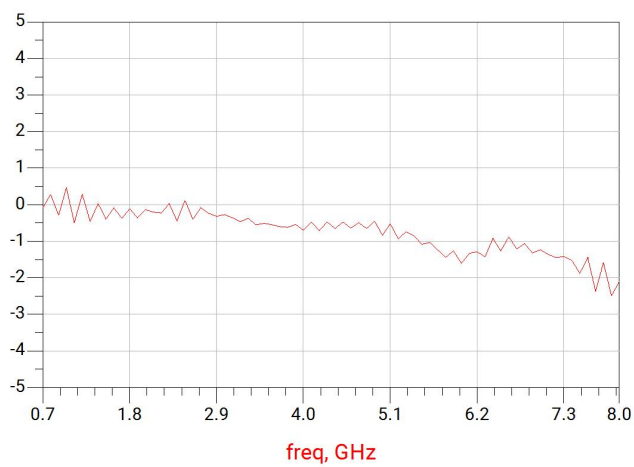
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Figure 8. MPD0780W2 Phase



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Outline Drawing

Figure 9. MPD0780W2 Outline Drawing

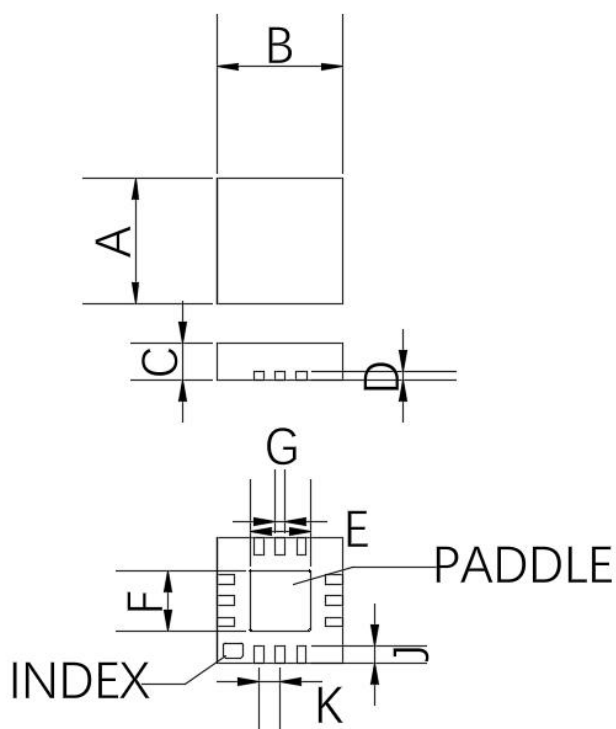
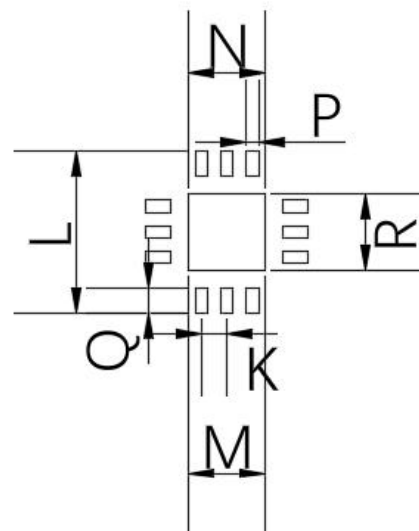


Figure 10. MPD0780W2 Recommended PCB Layout



Outline Dimensions (mm)

A	B	C	D	E	F	G	H	J
3.00	3.00	0.85	0.20	1.45	1.45	0.23	...	0.41
K	L	M	N	P	Q	R		Wt
0.51	3.23	3.23	1.52	0.25	0.51	1.52		0.02

Table 2. MPD0780W2 Ordering Information

Device	Package	Reel	Shipping
MPD0780W2	3*3mm	7"	3000/Reel

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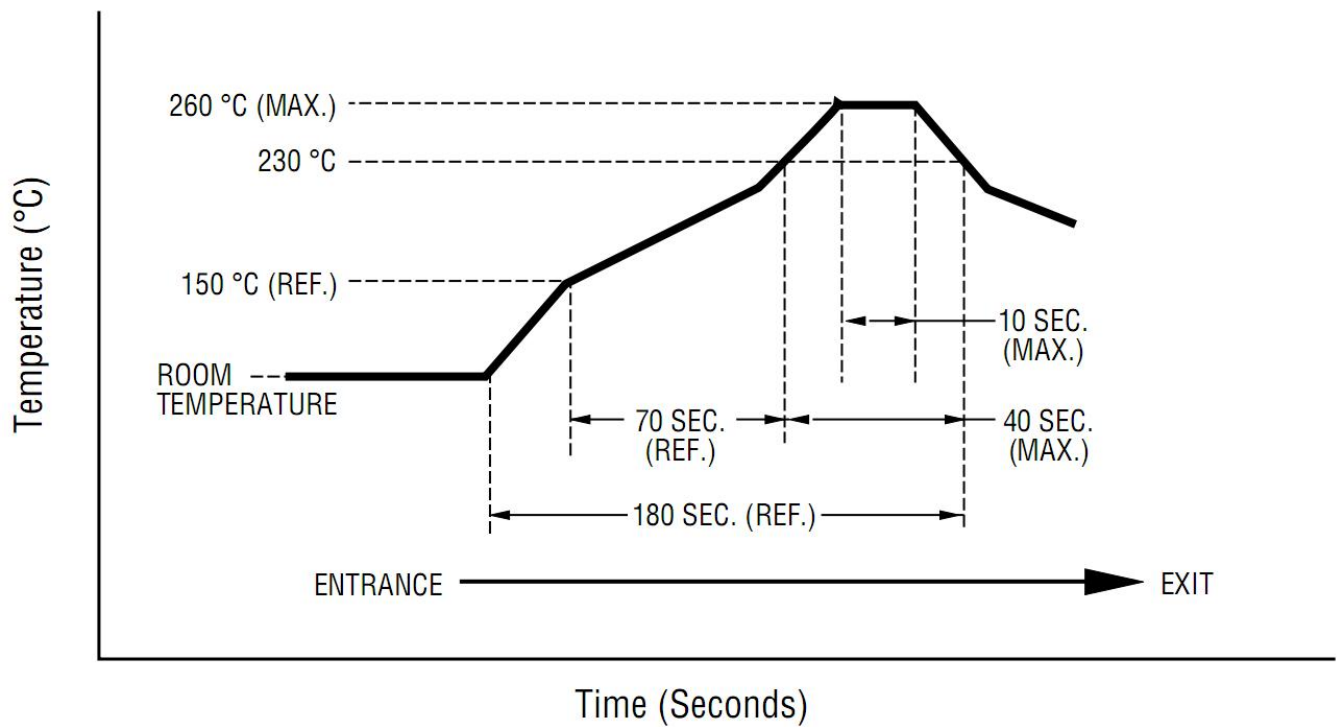
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Recommended Reflow Solder Profile

Figure 11. MPD0780W2 Recommended Reflow Solder Profile



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Revision	Description	Date
Rev0	Preliminary	2026/08/21

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