

MG-EWP4N

4 ways Power Splitter/Combiners



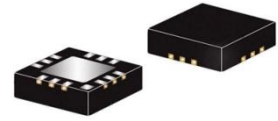
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Applications

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

Features

1. Low Insertion Loss 1.8dB typ based on IPD technology
2. Based on IPD technology
3. High isolation
4. Frequency wide Band
5. AEC-Q200 qualified



Description

The MG-EWP4N is a low cost, high performance four 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. MG-EWP4N is Based on IPD technology which possess excellent electrical and mechanical stability. All components are 100% RF tested.

Electrical Specifications

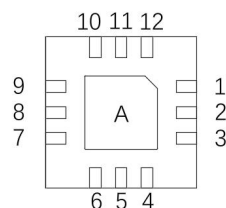
Table 1. MG-EWP4N Electrical Specifications

Item	Min.	Type.	Max.	Unit
Frequency Range	1215		1900	MHz
Insertion Loss (above 6 dB)		1.8		dB
Isolation		16		dB
Amplitude Unbalance			+1	
Phase Unbalance	-5		+5	Deg.
Return Loss		18		dB
Operating Temp.	-55		+125	°C
Power Input (2 port)			2	Watt

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

Port Configurations

Figure 1. MG-EWP4N Port Configurations (Bottom View)



Pin #	Connection
1/3/5/7/8/9/11/A	GND
2	In
4/6/10/12	Out

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Typical Performance

Figure 2. MG-EWP4N Return Loss

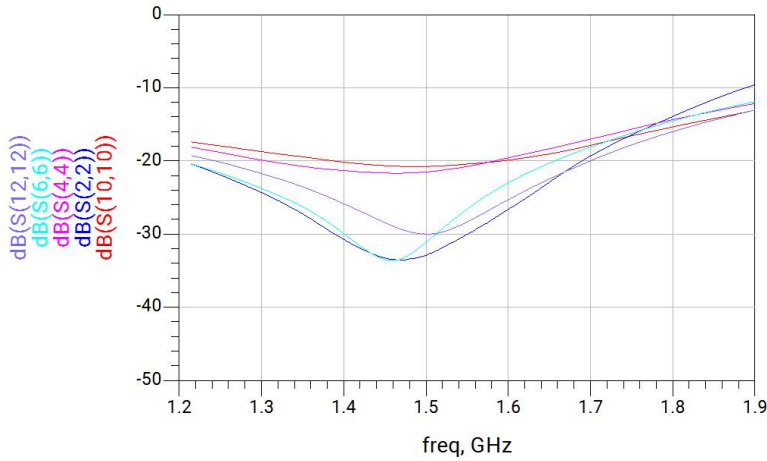


Figure 3. MG-EWP4N Insertion Loss (S4,2)

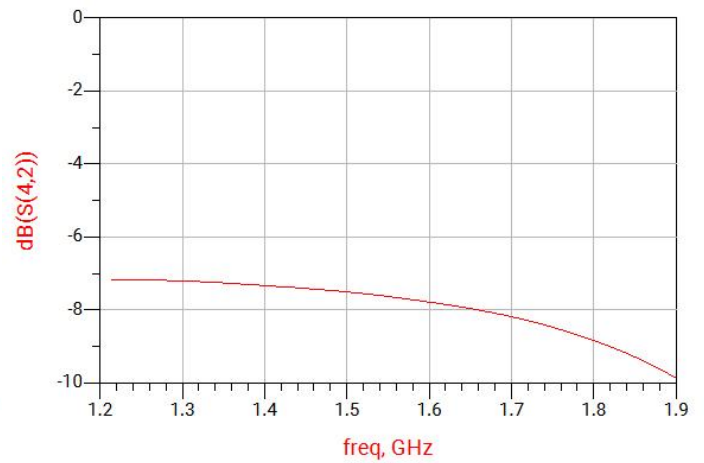


Figure 4. MG-EWP4N Insertion Loss (S6,2)

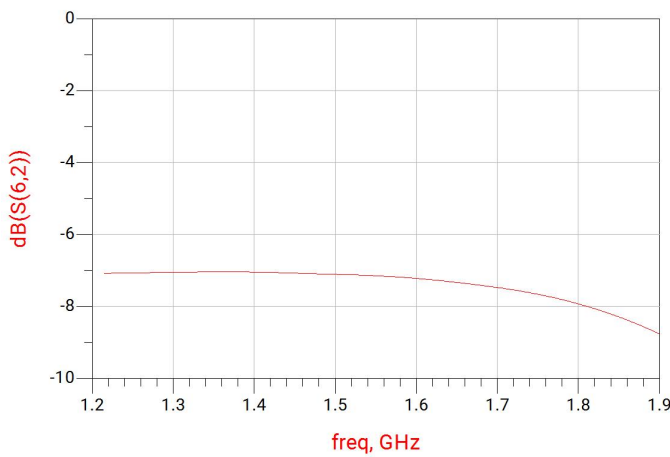


Figure 5. MG-EWP4N Insertion Loss (S10,2)

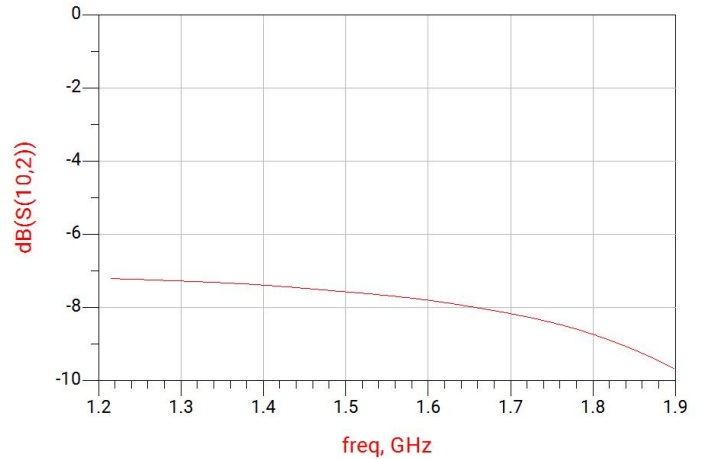


Figure 6. MG-EWP4N Insertion Loss (S12,2)

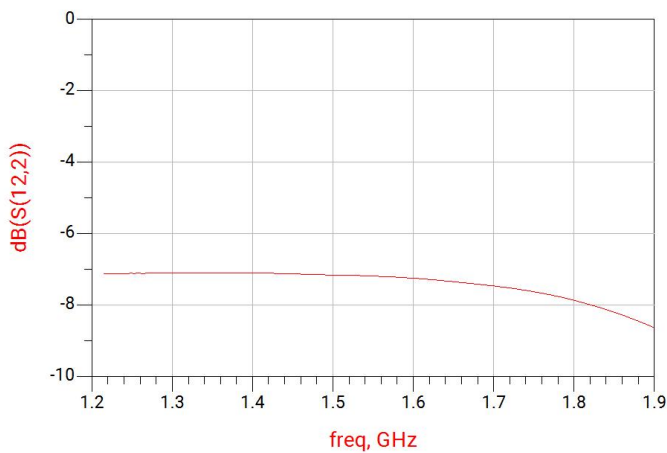
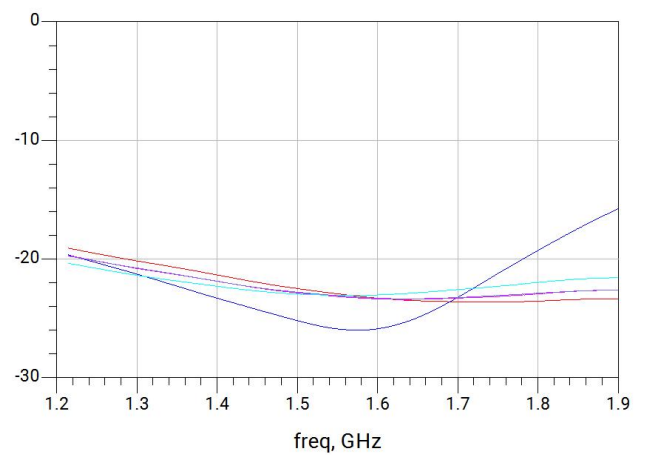


Figure 7. MG-EWP4N Isolation



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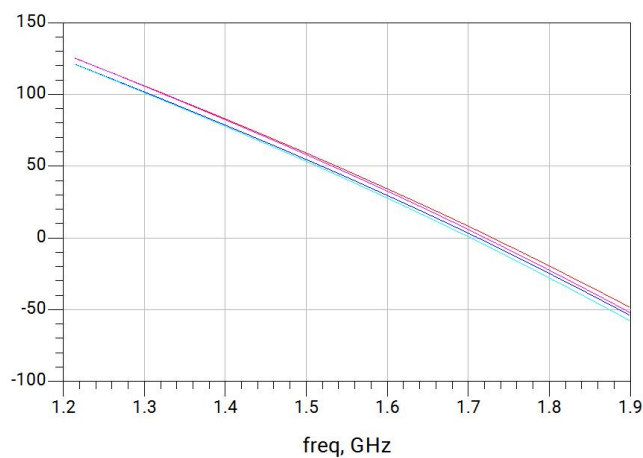
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Figure 8. MG-EWP4N Phase



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Outline Drawing

Figure 9. MG-EWP4N Outline Drawing

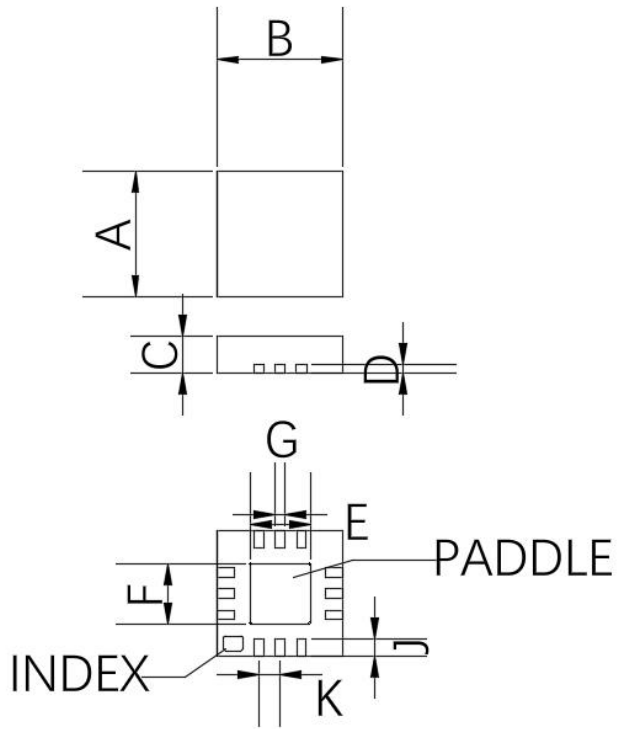
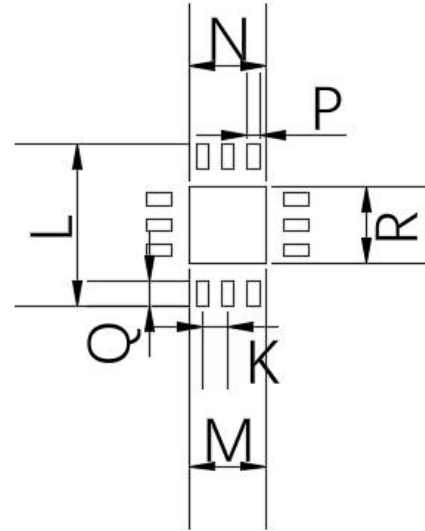


Figure 10. MG-EWP4N Recommended PCB Layout



Outline Dimensions (mm)

A	B	C	D	E	F	G	H	J
3.00	3.00	0.89	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

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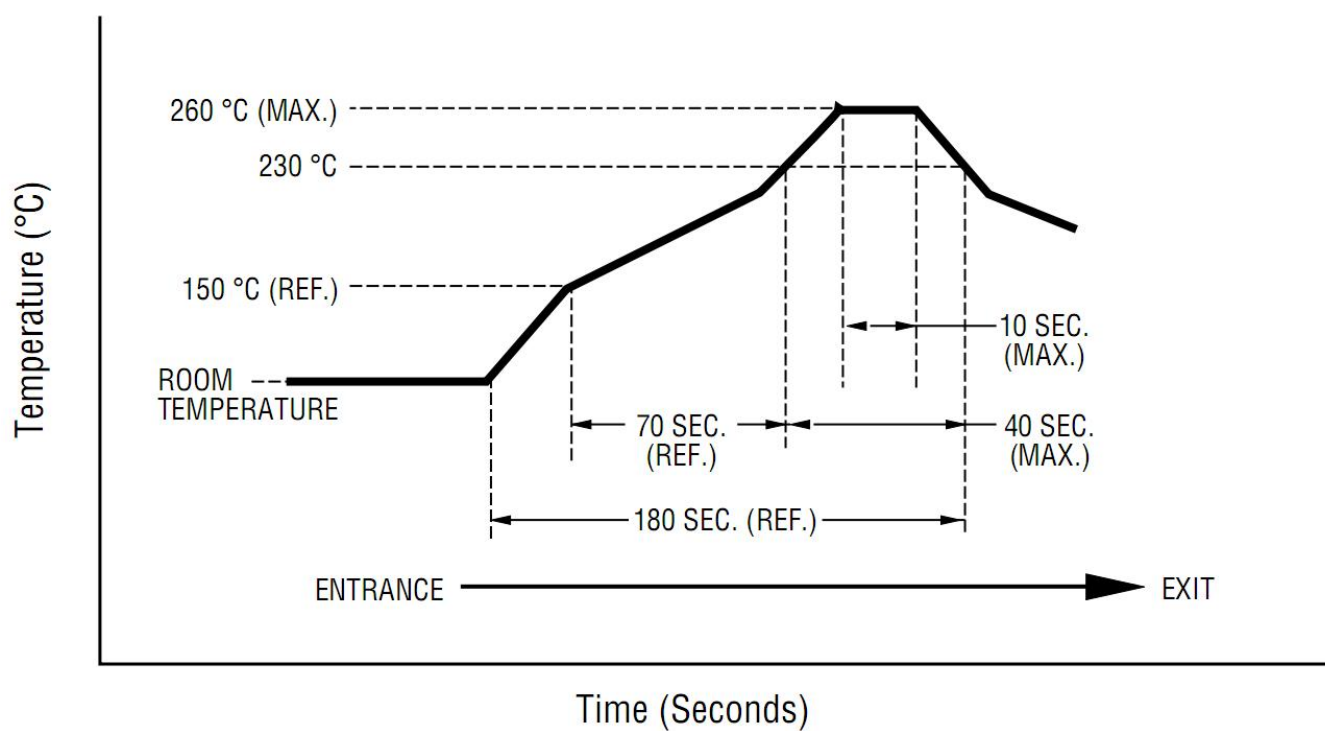
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Table 2. MG-EWP4N Ordering Information

Device	Package	Reel	Shipping
MG-EWP4N	3*3mm	7"	3000/Reel

Recommended Reflow Solder Profile

Figure 11. MG-EWP4N Recommended Reflow Solder Profile



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Revision	Description	Date
Rev0	Preliminary	2026/08/21

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