

MG-ESCG-2-322

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 0.7dB typ based on IPD technology
2. Based on IPD technology
3. High isolation
4. Frequency wide Band
5. AEC-Q200 qualified

Description

The MG-ESCG-2-322 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. MG-ESCG-2-322 is Based on IPD technology which possess excellent electrical and mechanical stability. All components are 100% RF tested.

Electrical Specifications

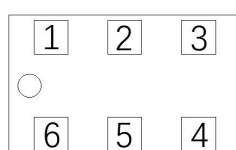
Table 1. MG-ESCG-2-322 Electrical Specifications

Item	Min.	Type.	Max.	Unit
Frequency Range	1800		3200	MHz
Insertion Loss (above 3 dB)		0.5	0.7	dB
Isolation	12		16	dB
Amplitude Unbalance	-0.5		+0.5	
Phase Unbalance	-3	2	+3	Deg.
Return loss (Port 2)	-20		-12	dB
Return loss (Port 4,6)	-21		-15	dB
Operating Temp.	-40		+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-ESCG-2-322 Port Configurations (Bottom View)



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

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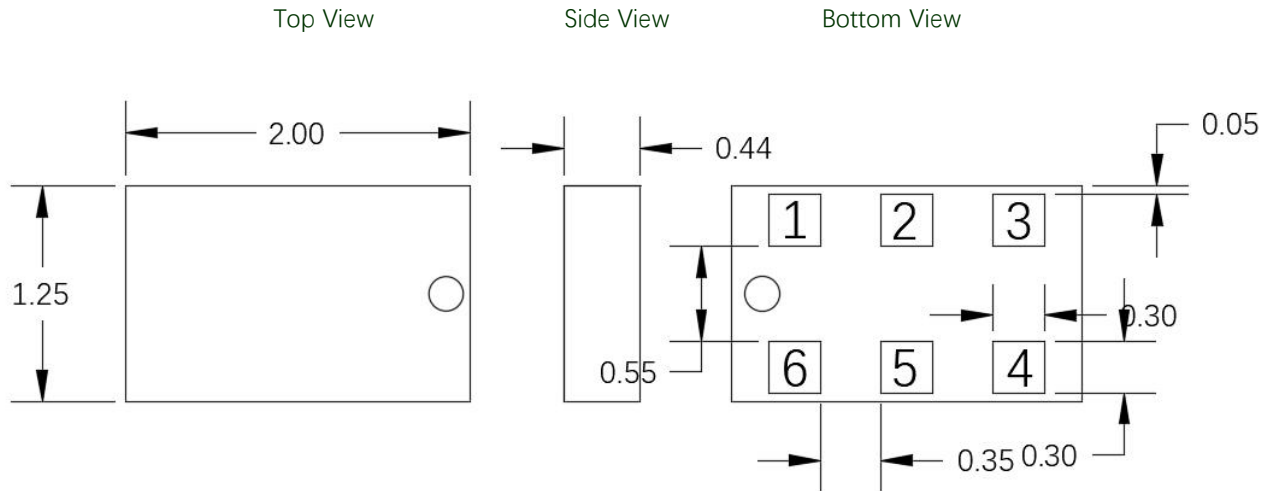
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Outline Drawing

Figure 2. MG-ESCG-2-322 Outline Drawing



Typical Performance

Figure 3. MG-ESCG-2-322 Insertion Loss

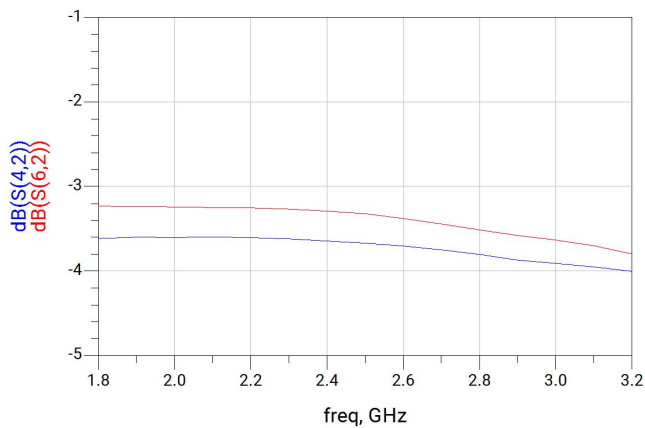


Figure 5. MG-ESCG-2-322 Return Loss (S44)

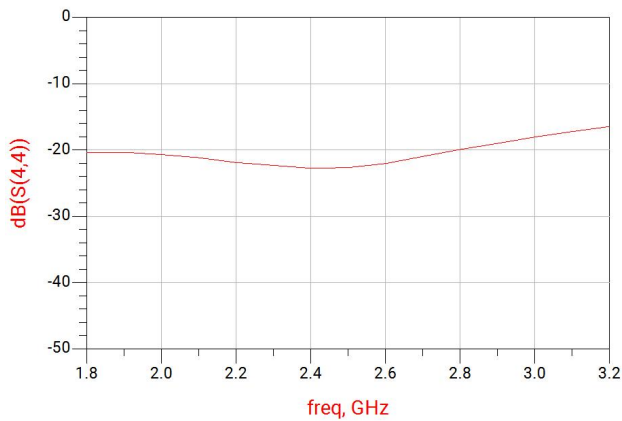


Figure 4. MG-ESCG-2-322 Return Loss (S22)

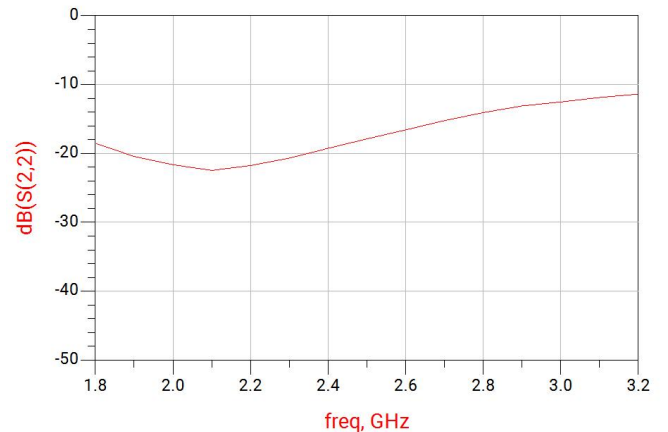
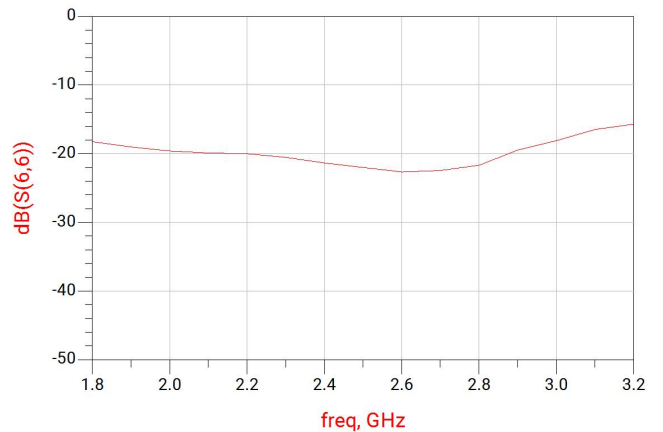


Figure 6. MG-ESCG-2-322 Return Loss (S66)



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Figure 7. MG-ESCG-2-322 Isolation

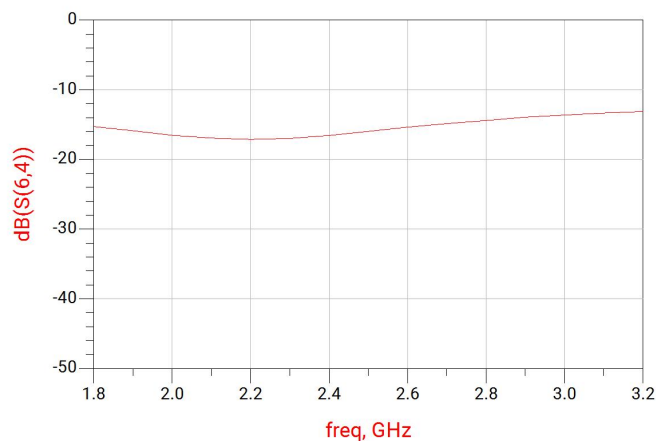
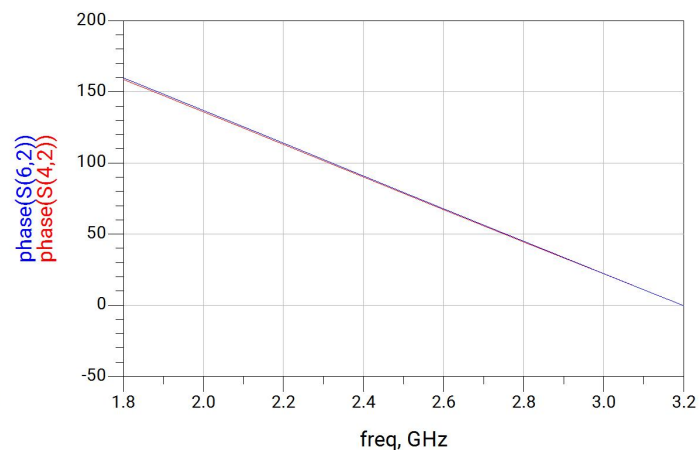


Figure 8. MG-ESCG-2-322 Phase



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Packaging and Ordering Information

Figure 9. MG-ESCG-2-322 Packaging Specifications

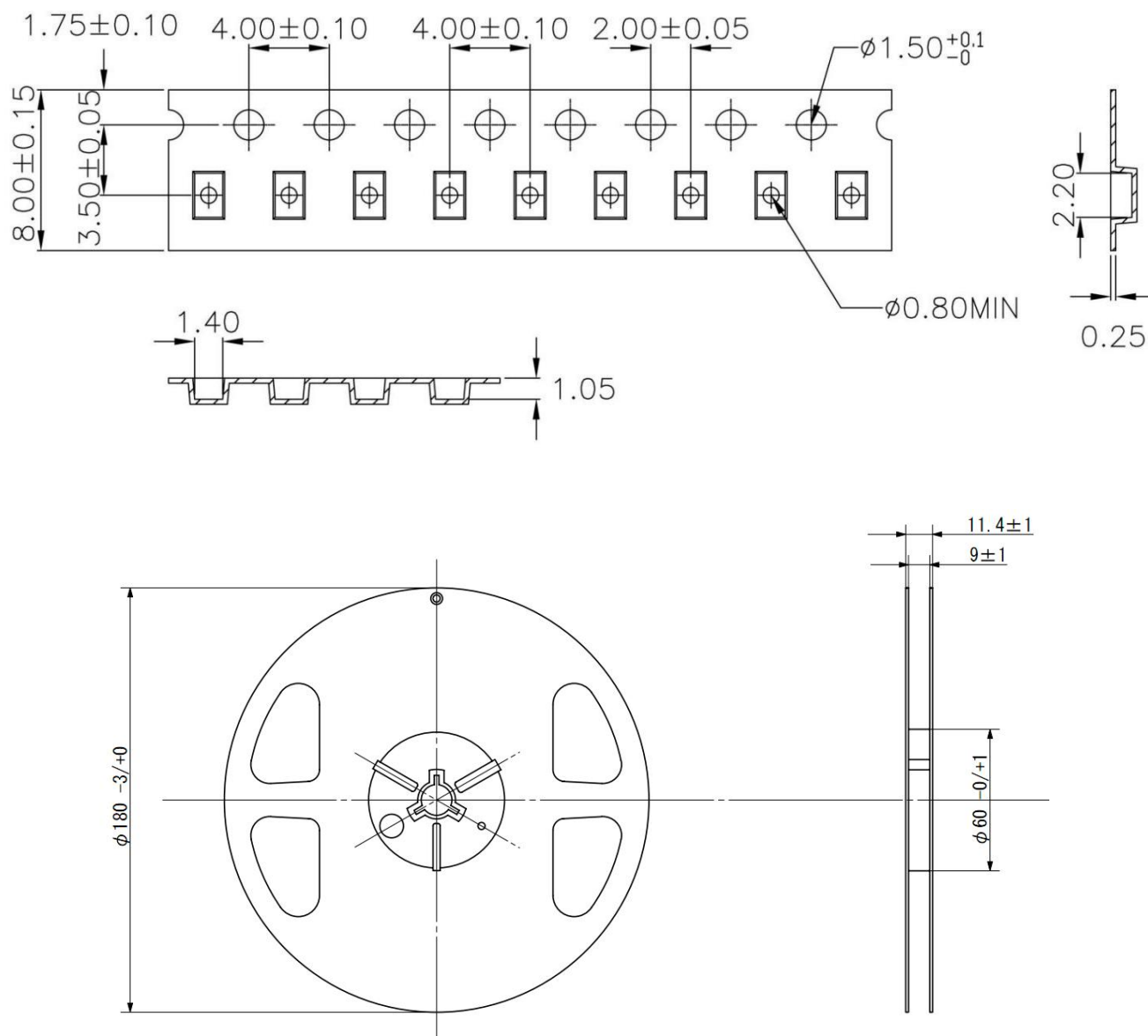


Table 2. MG-ESCG-2-322 Ordering Information

Device	Package	Reel	Shipping
MG-ESCG-2-322	2*1.25mm	7"	4000/Reel

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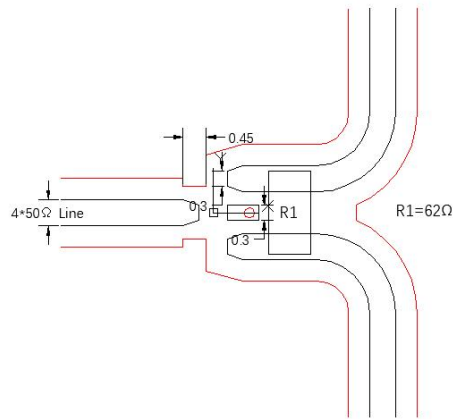
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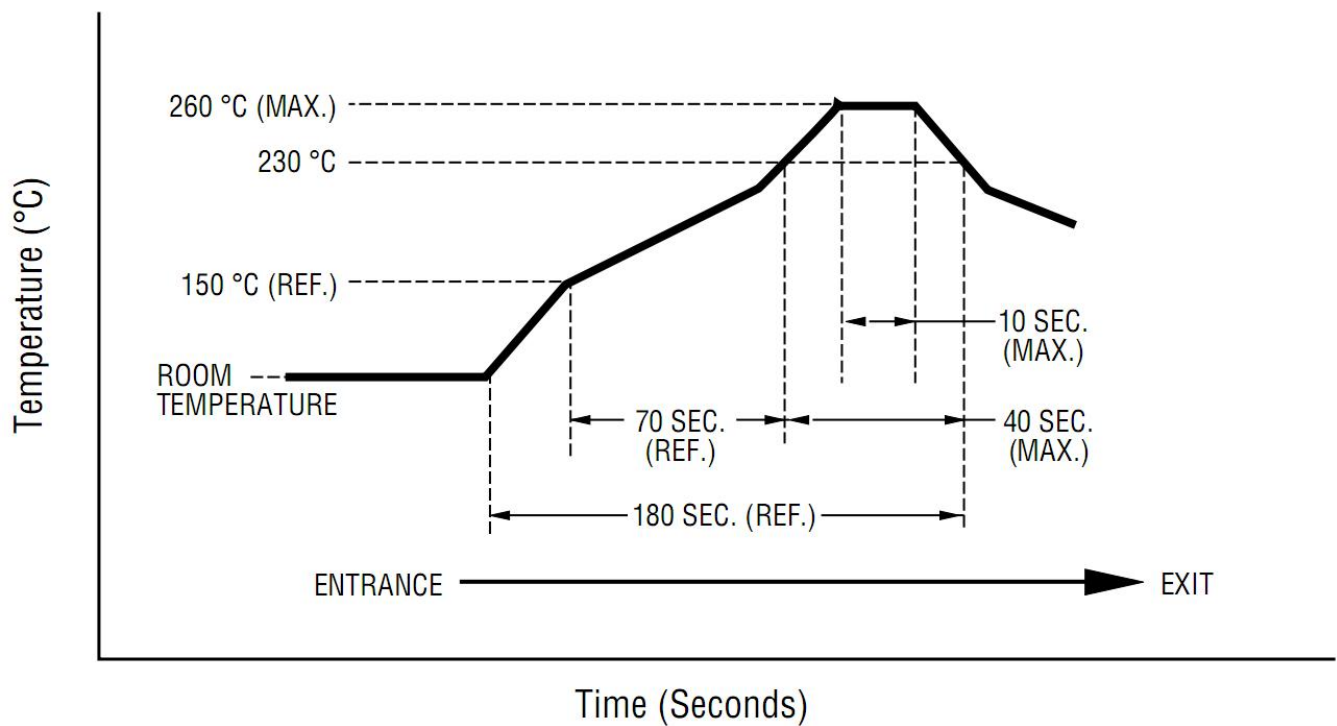
Recommended PCB Layout

Figure 10. Recommended PCB Layout



Recommended Reflow Solder Profile

Figure 11. MG-ESCG-2-322 Recommended Reflow Solder Profile



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Revision	Description	Date
Rev1	Preliminary	2026/08/21

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