

RF Balun Transformer

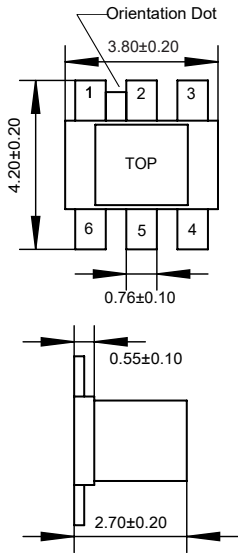
EBG1-83-B012389

2024-07-03 Rev. 1

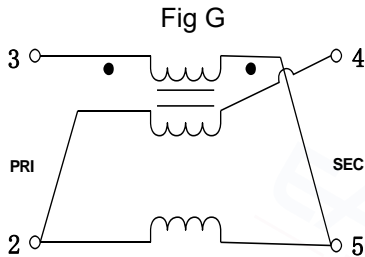


50Ω 1:1 Transmission Line Transformer 10-8000MHz

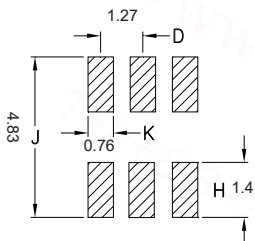
Outline Drawing(mm)



Electrical structure



Recommended layout(mm)



Pin Connections

Input	3
Output 1	4
Output 2	5
Ground	2
Not Used	1, 6

Features

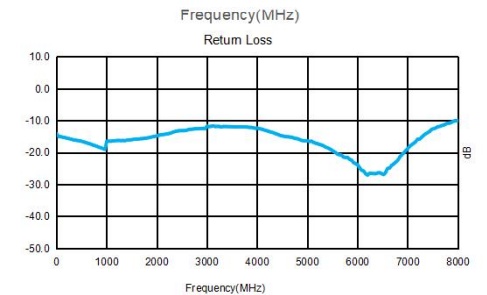
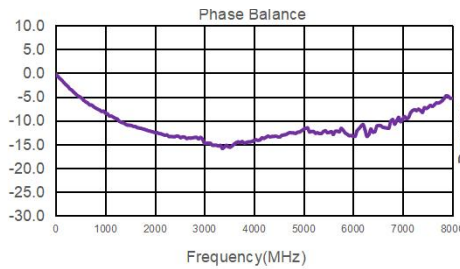
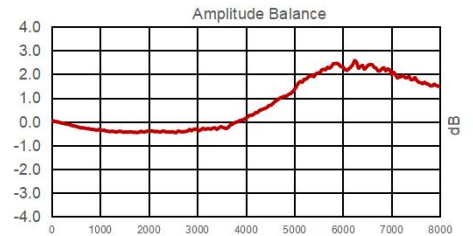
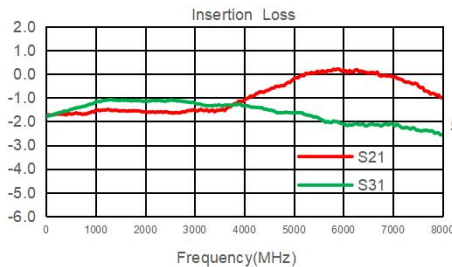
- Operating temperature range: -40℃ to +85℃
- Storage temperature range: -55℃ to +100℃
- 260℃ Reflow Compatible
- RoHS compliant and lead free
- Input Power: 200mW Max
- DC Current: 30mA Max

Applications

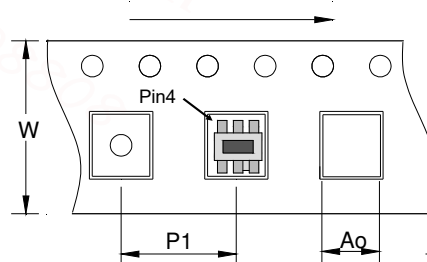
- For Motorola Walkie-talkie.
- For Car Streaming Media Rearview Mirror.
- For Broadband and Wireless Communications.
- For Wireless Microphone & Marine Communications.
- For Ideally Suited LTE, Cellular, UMTS, WiFi, WiMAX.
- For Differential Modulator/demodulator and Active Mixers.

Electrical Specifications: TA=25℃, 0dBm, Z0=50Ω

Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss (S21)	10-8000MHz	dB	—	1.7	3.0
Insertion Loss (S31)	10-8000MHz	dB	—	2.0	3.0
Amplitude Balance	10-8000MHz	dB	0.0	1.5	2.5
Phase Balance	10-8000MHz	°	0.0	15.0	30.0
Input Return Loss(Pin3)	10-8000MHz	dB	10.0	150	—



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	2000
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Ao	mm	4.30
Bo	mm	4.30
Ko	mm	3.00