

RF Directional Coupler

ECJ1001-C004331

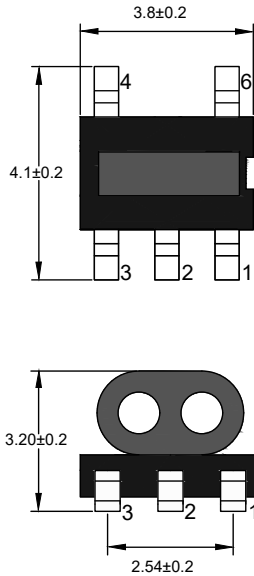
2023-12-28 Rev. 0



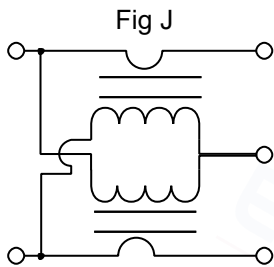
50Ω 10dB Directional Coupler

5-800MHz

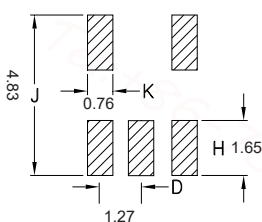
Outline Drawing(mm)



Electrical structure



Recommended layout(mm)



Pin Connections

Input	3
Coupling	1
Output	4
Ground	2
50Ω TERM EXTERNAL	6

Features

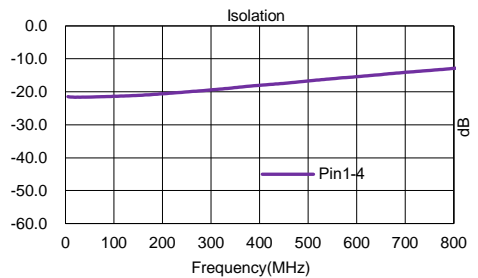
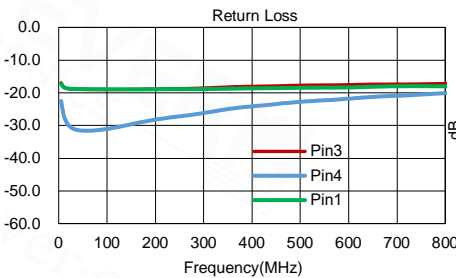
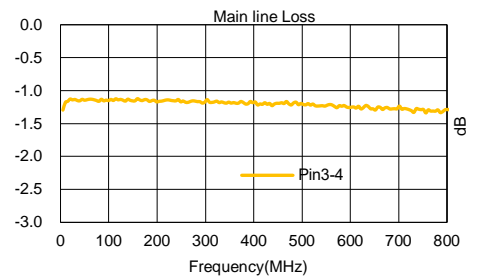
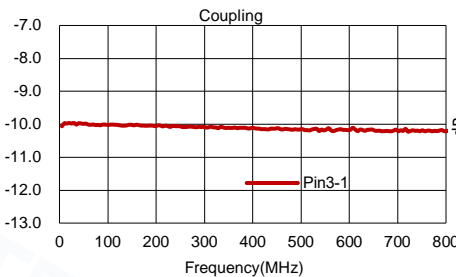
- Operating temperature range: -40°C to +85°C
- Storage temperature range: -55°C to +100°C
- 260°C Reflow Compatible
- RoHS compliant and lead free
- Input Power: 1.0W Max
- DC Current: 30mA Max

Applications

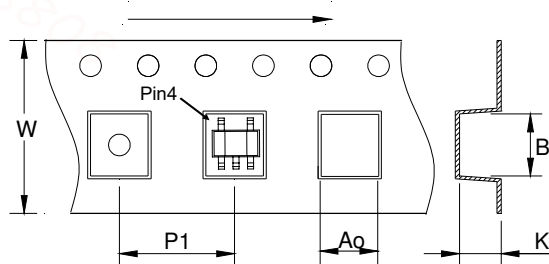
- For Motorola Walkie-talkie.
- For Car Streaming Media Rearview Mirror.
- For Broadband and Wireless Communications.
- For Wireless Microphone & Marine Communications.
- For Ideally Suited LTE, Cellular, UMTS, WiFi, WiMAX.
- For Differential Modulator/demodulator and Active Mixers.

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

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(Pin3-1)	5-800MHz	dB	9.7	10.2	10.8
Main line Loss(Pin3-4)	5-800MHz	dB	—	1.2	2.0
Input Return Loss(Pin3)	5-800MHz	dB	16.0	20.0	—
Coupling Return Loss(Pin1)	5-800MHz	dB	16.0	20.0	—
Output Return Loss(Pin4)	5-800MHz	dB	18.0	25.0	—
Directivity(Pin1-4)	5-800MHz	dB	10.0	15.0	—



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	4.20
Ko	mm	3.50