

RF Directional Coupler

ECJ0901-D010246

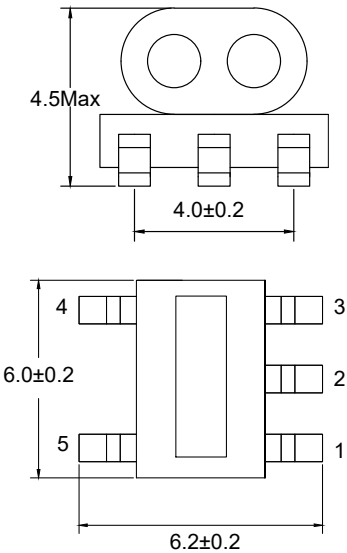
2025-07-12 Rev.1



50Ω 9dB Directional Coupler

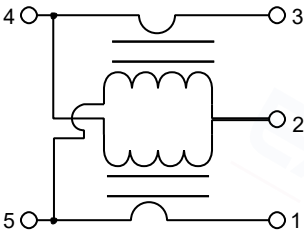
5-1000MHz

Outline Drawing(mm)

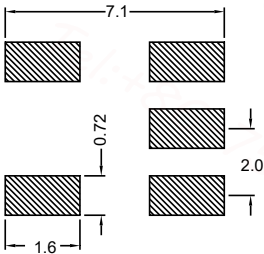


Electrical structure

Fig J



Recommended layout(mm)



Pin Connections

Input	3
Coupling	1
Output	4
Ground	2
External 50 Ω	5

Features

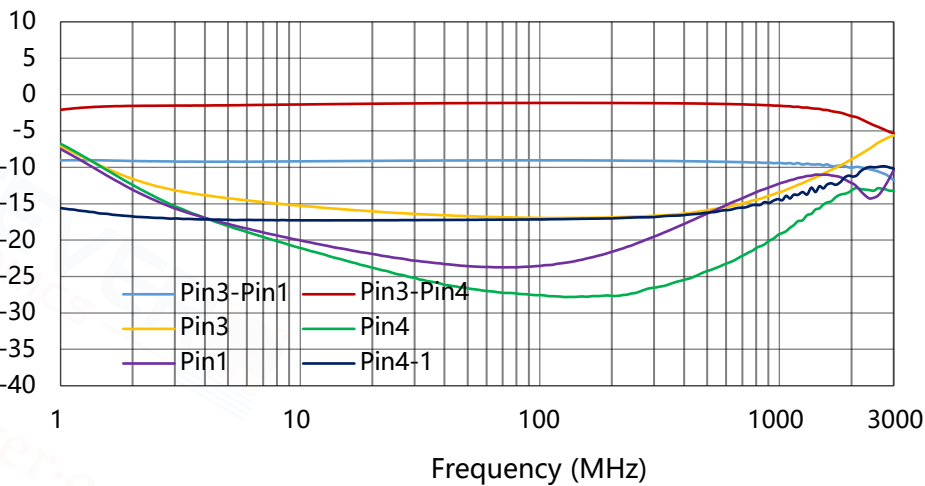
- RF Power, 0.25W Max
- DC Current, 30mA Max
- Operating temperature range:-40℃ to +85℃
- Storage temperature range: -55℃ to +100℃
- 260℃ Reflow Compatible
- RoHS compliant and lead free

Applications

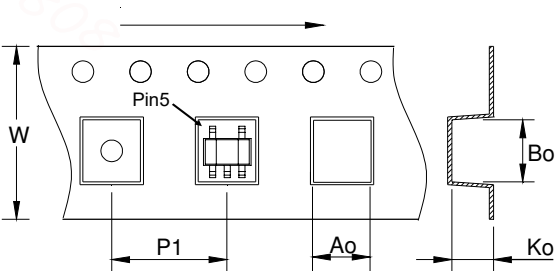
- For Motorola Walkie-talkie.
- For Car Streaming Media Rearview Mirror.
- For Broadband and Wireless Communications.
- For Wireless Microphone & Marine Communications.
- For Ideally Suited LTE, Cellular, UMTS, WiFi, WiMAX.
- For Differential Modulator/demodulator and Active Mixers.

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

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(Pin3-Pin1)	5-1000MHz	dB	8.0	9.0	10.0
Main line Loss(Pin3-Pin4)	5-1000MHz	dB	—	1.8	2.5
Input Return Loss(Pin3)	5-1000MHz	dB	12.0	16.0	—
Coupling Return Loss(Pin1)	5-1000MHz	dB	12.0	18.0	—
Output Return Loss(Pin4)	5-1000MHz	dB	12.0	20.0	—
Isolation(Pin4-1)	5-1000MHz	dB	14.0	16.0	—



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	1000
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	12.00
Ao	mm	7.20
Bo	mm	7.50
Ko	mm	4.60