

RF Directional Coupler

ECJ1001-C088331

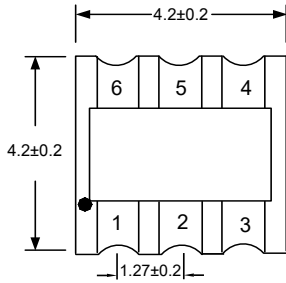
2024-08-24 Rev. 0



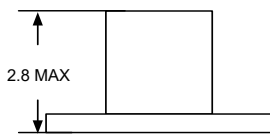
50Ω 10dB Directional Coupler

5-1000MHz

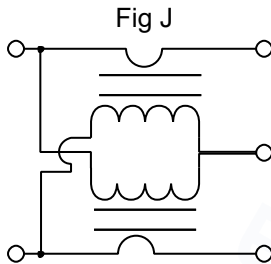
Outline Drawing(mm)



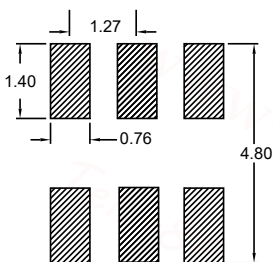
Top View



Electrical structure



Recommended layout(mm)



Pin Connections

Input	1
Coupling	3
Output	6
Ground	2
ISOLATE (DO NOT USE)	4, 5

Features

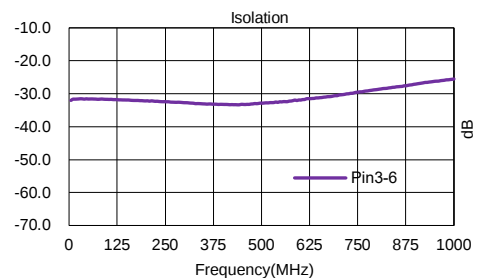
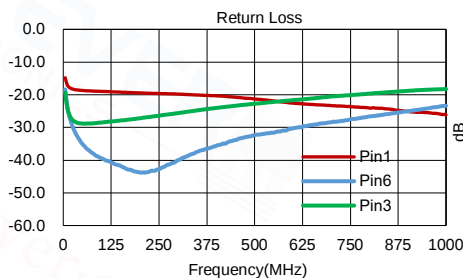
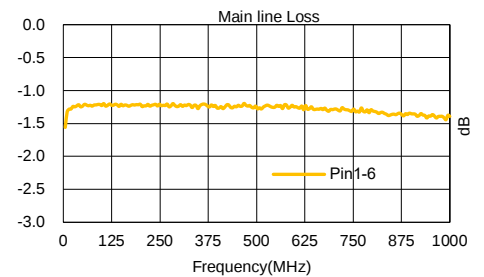
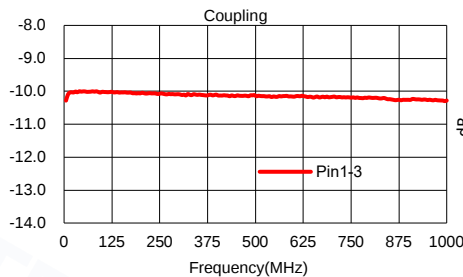
- Operating temperature range: -40℃ to +85℃
- Storage temperature range: -55℃ to +100℃
- 260℃ Reflow Compatible
- RoHS compliant and lead free
- Input Power:250 mW
- DC Current:30 mA

Applications

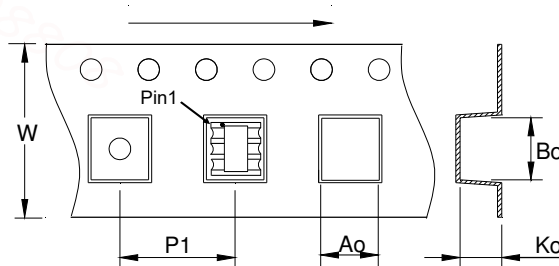
- For Motorola Walkie-talkie.
- For Car Streaming Media Rearview Mirror.
- For Broadband and Wireless Communications.
- For Wireless Microphone & Marine Communications.
- For Ideally Suited LTE, Cellular, UMTS, WiFi, WiMAX.
- For Differential Modulator/demodulator and Active Mixers.

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

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(Pin1-3)	5-1000MHz	dB	9.2	10.0	10.8
Main line Loss(Pin1-6)	5-1000MHz	dB	—	1.2	2.0
Input Return Loss(Pin1)	5-1000MHz	dB	16.0	20.0	—
Coupling Return Loss(Pin3)	5-1000MHz	dB	16.0	20.0	—
Output Return Loss(Pin6)	5-1000MHz	dB	18.0	25.0	—
Isolation(Pin3-6)	5-1000MHz	dB	18.0	25.0	—



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	2000
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	8.00
Ao	mm	4.80
Bo	mm	4.80
Ko	mm	3.50