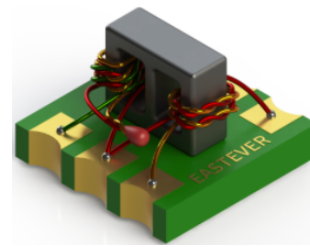


RF Directional Coupler

ECJ1301-D018331

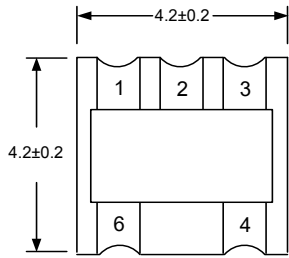
2024-01-29 Rev. 3



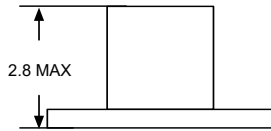
50Ω 13dB Directional Coupler

5-1000MHz

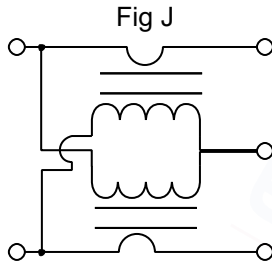
Outline Drawing(mm)



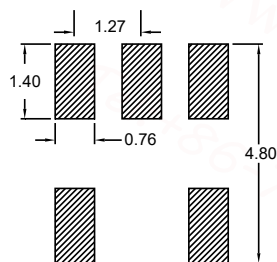
Top View



Electrical structure



Recommended layout(mm)



Pin Connections

Input	3
Coupling	1
Output	4
Ground	2
External 50 Ω	6

Features

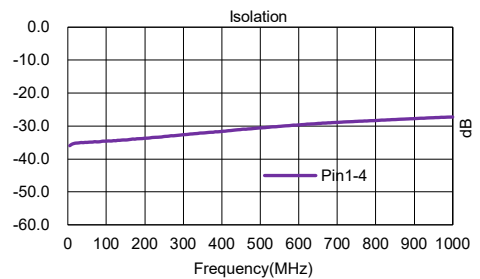
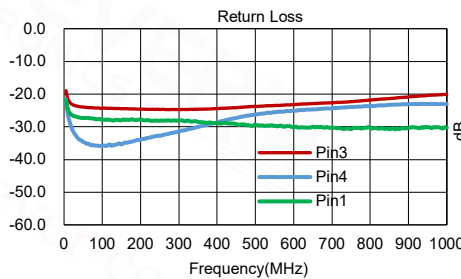
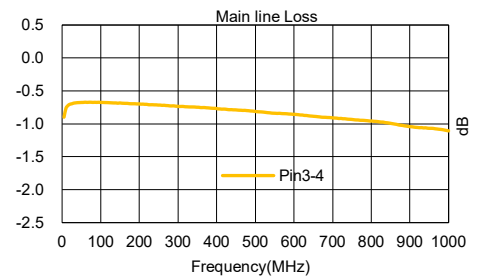
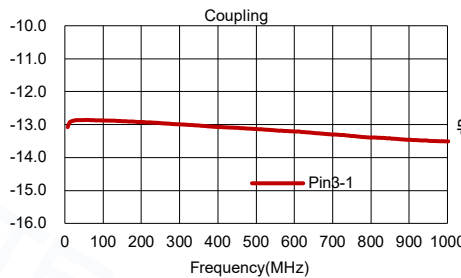
- Operating temperature range: -40°C to +85°C
- Storage temperature range: -55°C to +100°C
- 260°C Reflow Compatible
- RoHS compliant and lead free
- Input Power: 1 W
- DC Current: 30 mA

Applications

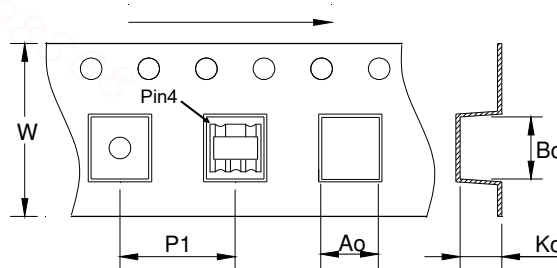
- For Motorola Walkie-talkie.
- For Car Streaming Media Rearview Mirror.
- For Broadband and Wireless Communications.
- For Wireless Microphone & Marine Communications.
- For Ideally Suited LTE, Cellular, UMTS, WiFi, WiMAX.
- For Differential Modulator/demodulator and Active Mixers.

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

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(Pin3-1)	5-1000MHz	dB	12.5	13.0	13.8
Main line Loss(Pin3-4)	5-1000MHz	dB	—	1.0	1.5
Input Return Loss(Pin3)	5-1000MHz	dB	16.0	22.0	—
Coupling Return Loss(Pin1)	5-1000MHz	dB	22.0	30.0	—
Output Return Loss(Pin2)	5-1000MHz	dB	16.0	22.0	—
Isolation(Pin1-4)	5-1000MHz	dB	25.0	28.0	—



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