

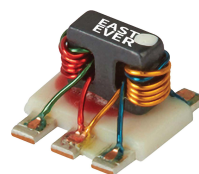
RF Directional Coupler

ECJ1001-D012331

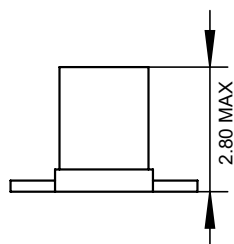
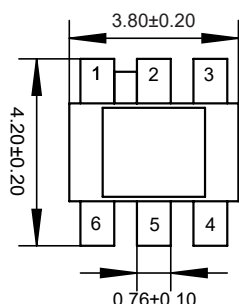
2026-06-24 Rev. 1

50Ω 10dB Directional Coupler

5-2250MHz

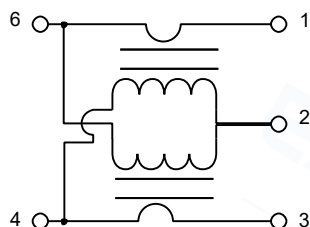


Outline Drawing(mm)

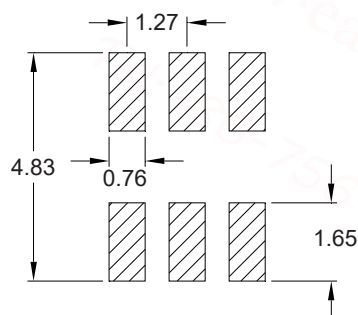


Electrical Structure

Fig J



Recommended Layout(mm)



Pin Connections

Input	3
Coupling	1
Output	4
Ground	2
Isolation	6

Features

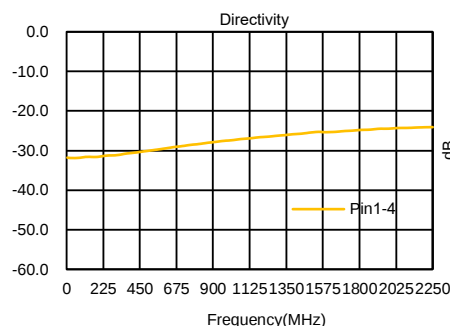
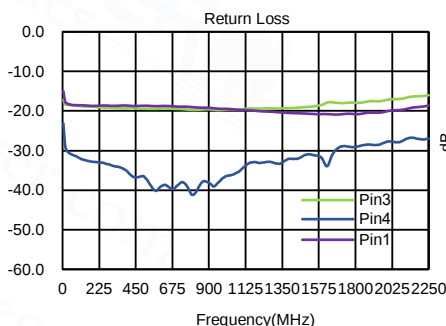
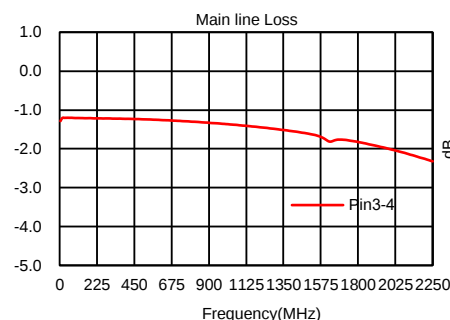
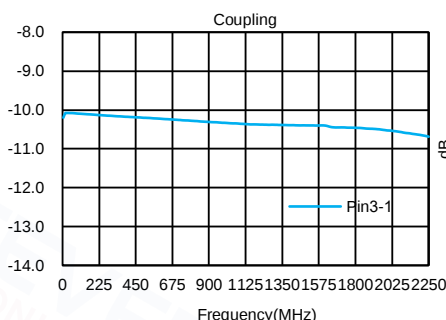
- Input Power:0.5W Max
- DC Current: 30mA Max
- 260°C Reflow Compatible
- RoHS compliant and lead free
- Operating temperature range:-40℃ to +85℃
- Storage temperature range: -55℃ to +100℃

Applications

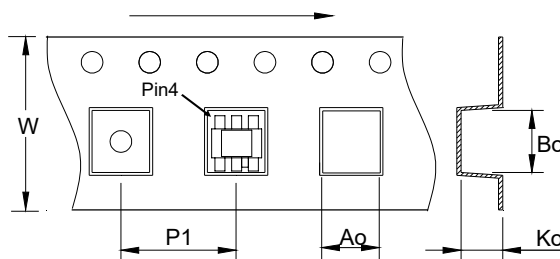
- For Motorola Walkie-talkie.
- For Car Streaming Media Rearview Mirror.
- For Broadband and Wireless Communications.
- For Wireless Microphone & Marine Communications.
- For Ideally Suited LTE, Cellular, UMTS, WiFi, WiMAX.
- For Differential Modulator/demodulator and Active Mixers.

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

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(Pin3-1)	5-2250MHz	dB	9.2	10.0	10.8
Main line Loss(Pin3-4)	5-950MHz 950-2250MHz	dB	—	1.3 2.2	1.8 2.6
Input Return Loss(Pin3)	5-950MHz 950-2250MHz	dB	—	18.0 16.0	—
Coupling Return Loss(Pin1)	5-950MHz 950-2250MHz	dB	—	24.0 20.0	—
Output Return Loss(Pin4)	5-950MHz 950-2250MHz	dB	—	18.0 16.0	—
Directivity(Pin1-4)	5-400MHz 400-950MHz 950-2250MHz	dB	17.0 15.0 9.0	21.0 18.0 14.0	—



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	4.30
Ko	mm	3.00