

RF Directional Coupler

ECJ0701-C172A31

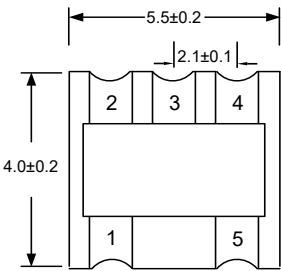
2025-07- 31 Rev. 1



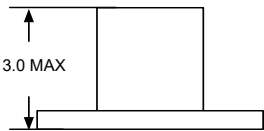
75Ω 7dB Directional Coupler

5-2400MHz

Outline Drawing(mm)

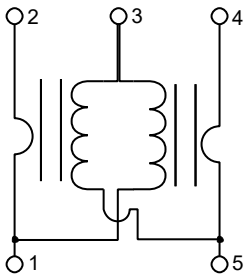


Top View

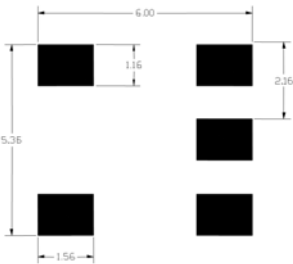


Electrical structure

Fig J



Recommended layout(mm)



Pin Connections

Input	1
Coupling	5
Output	2
Ground	3
75ΩTERM EXTERNAL	4

Features

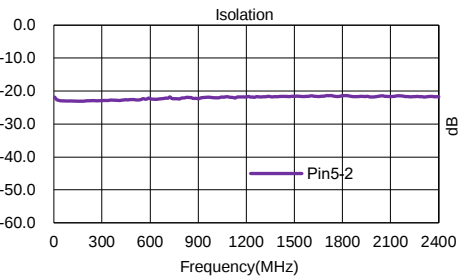
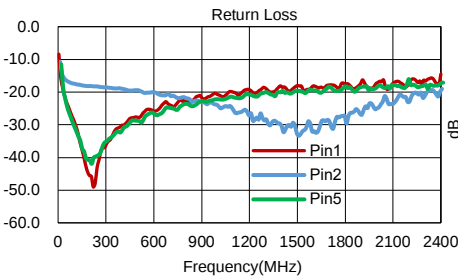
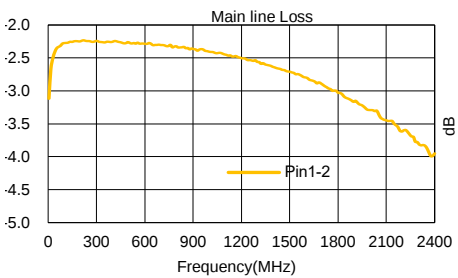
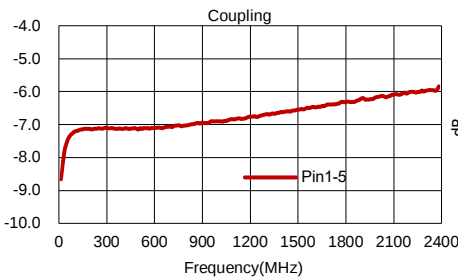
- Operating temperature range: -40℃ to +85℃
- Storage temperature range: -55℃ to +100℃
- 260℃ Reflow Compatible
- RoHS compliant and lead free
- Input Power: 0.25W
- DC Current:200 mA

Applications

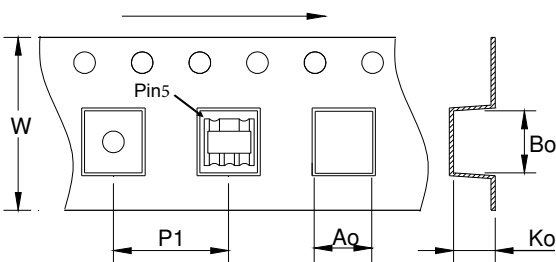
- For Docsis 3.0&4.0Cable Modem.
- For Wideband Push-pull Amplifiers.
- For CATV Amplifiers Module & Set top box.
- For CATV Optical Receivers and Amplifiers.
- For VHF/UHF Transmitters and Push-pull Amplifiers.

Electrical Specifications:TA=25℃, 0dBm, Z0=75Ω

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(Pin1-5)	5-2400MHz	dB	5.5	7.0	8.5
Main line Loss(Pin1-2)	5-2400MHz	dB	—	3.0	4.5
Input Return Loss(Pin1)	5-2400MHz	dB	10.0	18.0	—
Coupling Return Loss(Pin5)	5-2400MHz	dB	10.0	18.0	—
Output Return Loss(Pin2)	5-2400MHz	dB	10.0	18.0	—
Directivity(Pin5-2)	5-2400MHz	dB	18.0	20.0	—



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	1500
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	12.00
Ao	mm	6.40
Bo	mm	4.80
Ko	mm	3.20



Balun Transformer | Coupler | Divider | Inductor | Choke | Bead | Air Coil | LAN Transformer

Zuhai Eastever Electronic Co.,Ltd | Building 5,Yuxun Science Park,7 Pingxi 1st Rd,Xiangzhou Dt,Zuhai | www.east-ever.com | james@east-ever.com | TEL: . 86-756-8898808