

RF Directional Coupler

ECJ0701-C143106

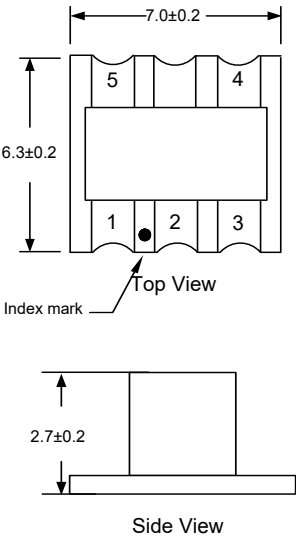
2024-12-23 Rev. 1



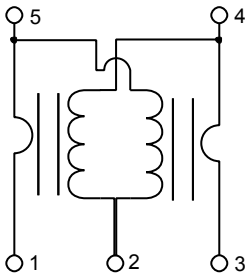
75Ω 7.0dB Directional Coupler

5-1225MHz

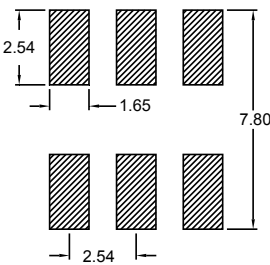
Outline Drawing(mm)



Electrical structure



Recommended layout(mm)



Pin Connections

Input	1
Coupling	3
Output	5
Ground	2
External 75 Ω	4

Features

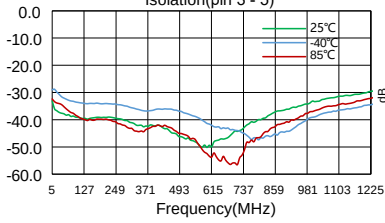
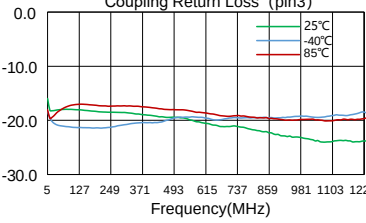
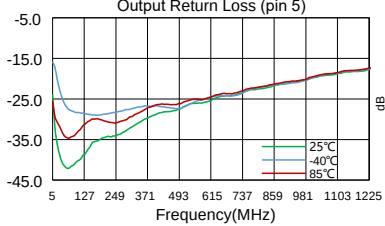
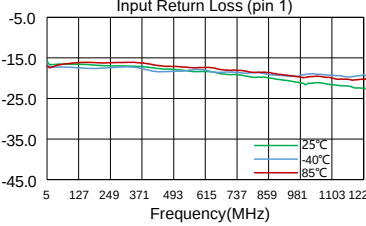
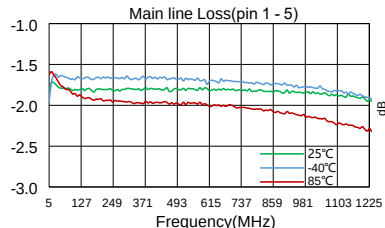
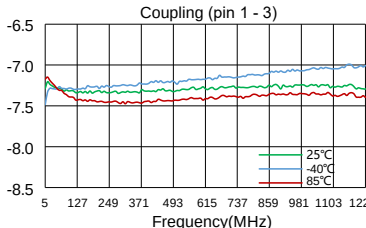
- Operating temperature range:-40℃ to +85℃
- Storage temperature range: -55℃ to +100℃
- 260℃ Reflow Compatible
- RoHS compliant and lead free
- Input Power:2W MAX
- DC Current:500 mA MAX

Applications

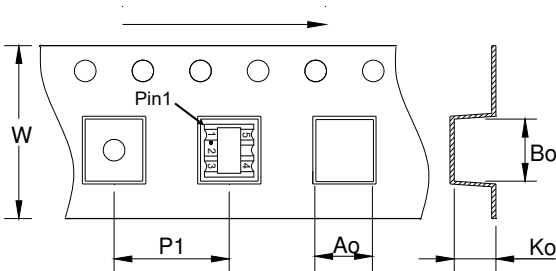
- For Docsis 3.0&4.0Cable Modem.
- For Wideband Push-pull Amplifiers.
- For CATV Amplifiers Module & Set top box.
- For CATV Optical Receivers and Amplifiers.

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

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(Pin1-3)	5-1225MHz	dB	7.0	7.5	8.0
Main line Loss(Pin1-5)	5-700MHz 700-1225MHz	dB	—	1.8 2.0	2.0 2.2
Input Return Loss(Pin1)	5-700MHz 700-1225MHz	dB	15.0 15.0	17.0 16.0	—
Output Return Loss(Pin5)	5-700MHz 700-1225MHz	dB	18.0 18.0	26.0 20.0	—
Coupling Return Loss(Pin3)	5-700MHz 700-1225MHz	dB	15.0 15.0	18.0 16.0	—
Isolation(Pin3-5)	5-100MHz 100-700MHz 700-1225MHz	dB	28.0 40.0 26.0	35.0 42.0 29.0	— — —



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	1500
Reel Size	mm	330
Tape Width	mm	24.00
Pitch	mm	12.00
Ao	mm	7.20
Bo	mm	8.10
Ko	mm	3.80



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

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