

RF Directional Coupler

ECJ1705-C001435

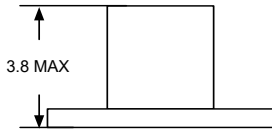
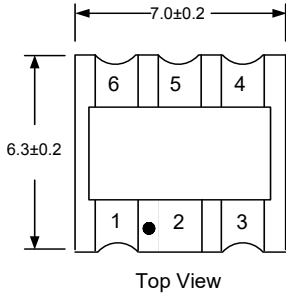
2022-08-15 Rev. 0



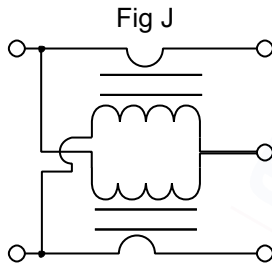
75Ω 17.5dB Directional Coupler

5-2000MHz

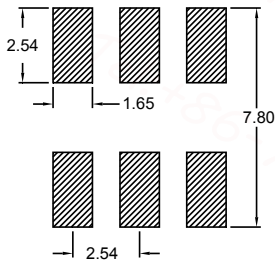
Outline Drawing(mm)



Electrical structure



Recommended layout(mm)



Pin Connections

Input	1
Coupling	3
Output	6
Ground	2
External 75 Ω	4

Features

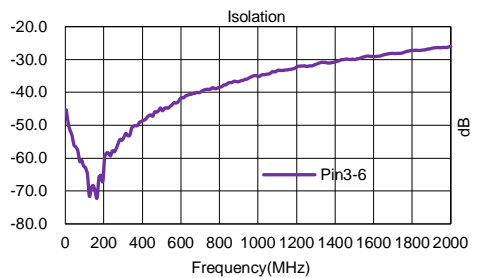
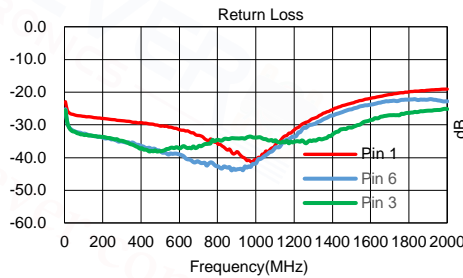
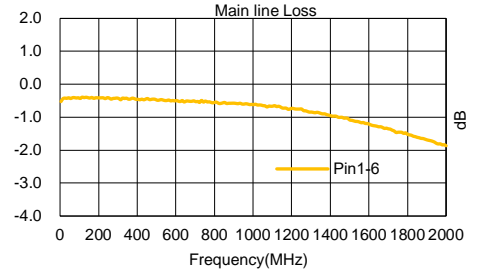
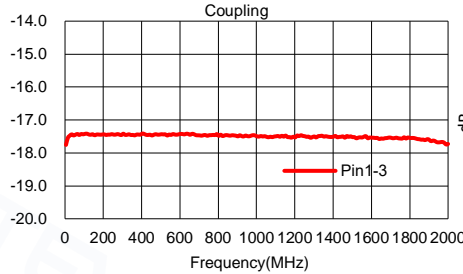
- Input Power:2W Max
- DC Current:500 mA Max
- 260°C Reflow Compatible
- RoHS compliant and lead free
- Operating temperature range: -40 °C to+85 °C
- Storage temperature range: -55 °C to +100 °C

Applications

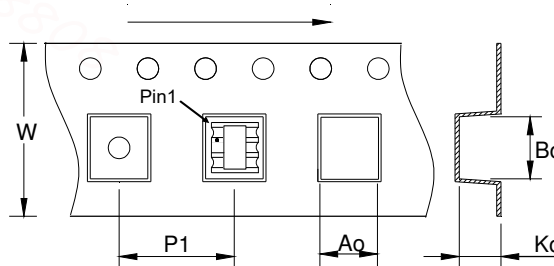
- For Docsis 3.0 & 3.1 Cable Modem.
- For Wideband Push-pull Amplifiers.
- For CATV Amplifiers Module & Set top box.
- For CATV Optical Receivers and Amplifiers.
- For VHF/UHF Transmitters and Push-pull Amplifiers.

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

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(Pin1-3)	5-2000MHz	dB	16.8	17.5	18.3
Main line Loss(Pin1-6)	5-2000MHz	dB	—	1.4	2.0
Input Return Loss(Pin1)	5-2000MHz	dB	16.0	22.0	—
Coupling Return Loss(Pin3)	5-2000MHz	dB	18.0	25.0	—
Output Return Loss(Pin6)	5-2000MHz	dB	16.0	25.0	—
Isolation(Pin3-6)	5-2000MHz	dB	20.0	26.0	—



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	1500
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	12.00
Ao	mm	7.20
Bo	mm	8.10
Ko	mm	4.20