

RF Directional Coupler

ECJ1501-C009005

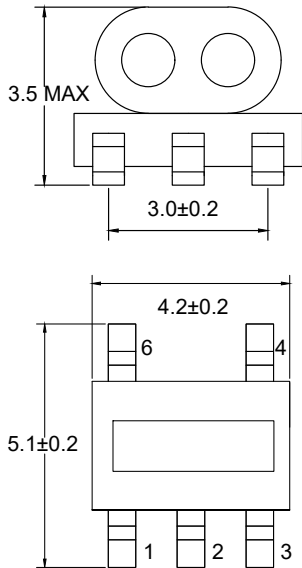
2021-10-12 Rev. 0



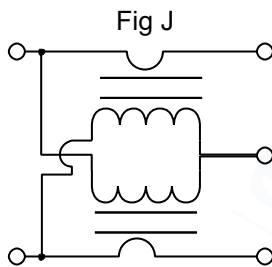
75Ω 15dB Directional Coupler

5-1250MHz

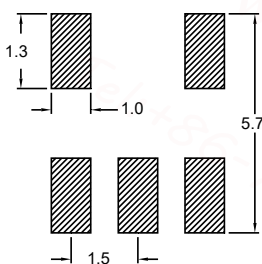
Outline Drawing(mm)



Electrical structure



Recommended layout(mm)



Pin Connections

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

Features

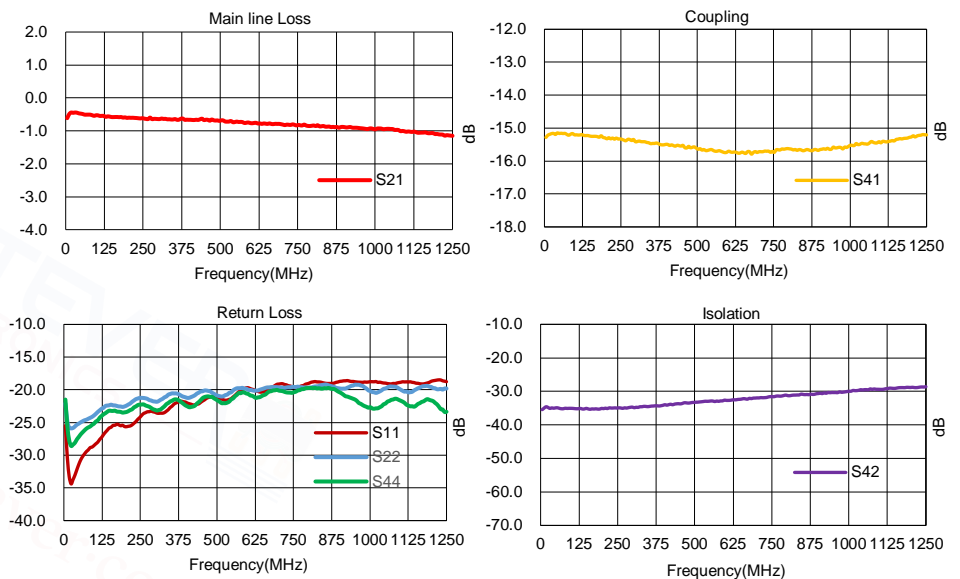
- Operating temperature range: -40°C to +85°C
- Storage temperature range: -55°C to +100°C
- 260°C Reflow Compatible
- RoHS compliant and lead free
- Input Power: 250 mW Max
- DC Current: 30 mA Max

Applications

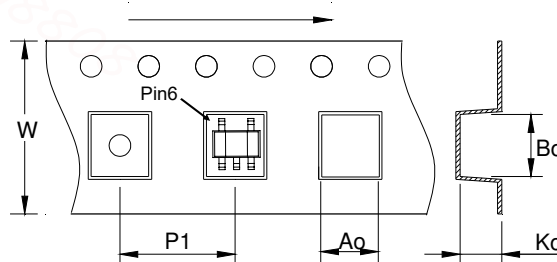
- For Docsis 3.0 & 3.1 Cable Modem.
- For Wideband Push-pull Amplifiers.
- For CATV Amplifiers Module & Set top box.
- For CATV Optical Receivers and Amplifiers.
- For VHF/UHF Transmitters and Push-pull Amplifiers.

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

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(S41)	5-1250MHz	dB	14.0	15.0	16.0
Main line Loss(S21)	5-1250MHz	dB	—	1.0	1.8
Input Return Loss(S11)	5-1250MHz	dB	16.0	18.0	—
Coupling Return Loss(S44)	5-1250MHz	dB	16.0	20.0	—
Output Return Loss(S22)	5-1250MHz	dB	16.0	18.0	—
Isolation(S42)	5-1250MHz	dB	20.0	30.0	—



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	4.50
Bo	mm	5.70
Ko	mm	3.60