

RF Directional Coupler

ECJ1601-B001140

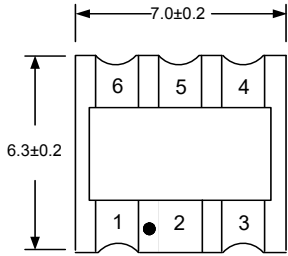
2021-05-25 Rev. 0



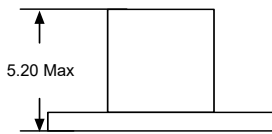
75Ω 16dB Directional Coupler

5-150MHz

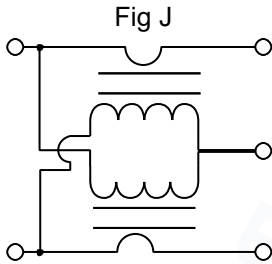
Outline Drawing(mm)



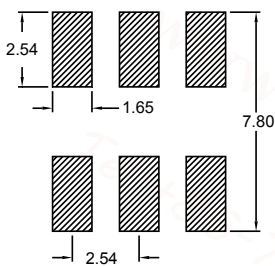
Top View



Electrical structure



Recommended layout(mm)



Pin Connections

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

Features

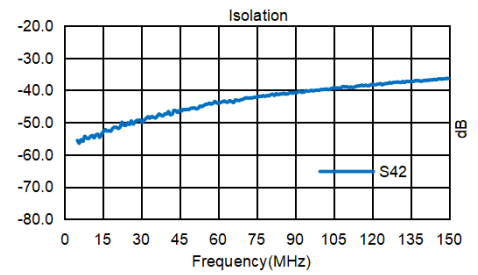
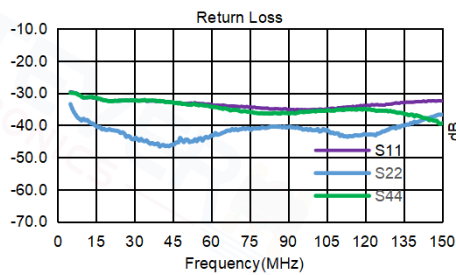
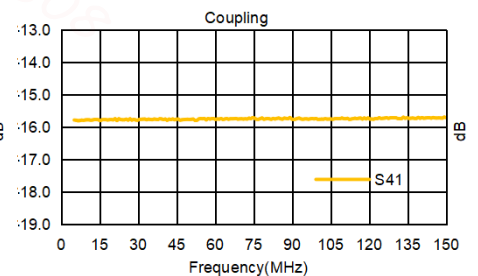
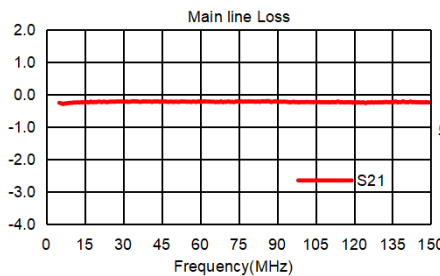
- Input Power:2.0 W Max
- DC Current: 200 mA Max
- 260°C Reflow Compatible
- RoHS compliant and lead free
- Operating temperature range: -40 °C to+85 °C
- Storage temperature range: -55 °C to +100 °C

Applications

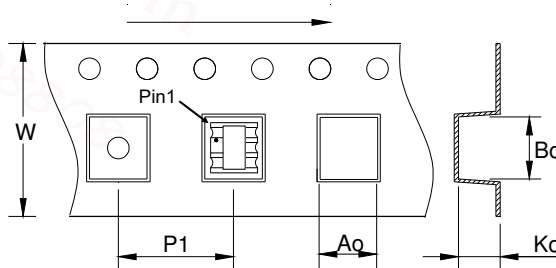
- For Docsis 3.0 & 3.1 Cable Modem.
- For Wideband Push-pull Amplifiers.
- For CATV Amplifiers Module & Set top box.
- For CATV Optical Receivers and Amplifiers.
- For VHF/UHF Transmitters and Push-pull Amplifiers.

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

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(S41)	5-150MHz	dB	15.0	16.0	17.0
Main line Loss(S21)	5-150MHz	dB	—	0.20	0.80
Input Return Loss(S11)	5-150MHz	dB	25.0	35.0	—
Coupling Return Loss(S44)	5-150MHz	dB	25.0	35.0	—
Output Return Loss(S22)	5-150MHz	dB	25.0	35.0	—
Isolation(S42)	5-150MHz	dB	25.0	40.0	—



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	1000
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	12.00
Ao	mm	7.80
Bo	mm	8.50
Ko	mm	5.40