

RF Directional Coupler

ECJ1301-D018331

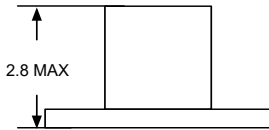
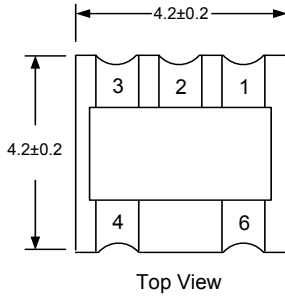
2021-07-07 Rev. 0

75Ω 13dB Directional Coupler

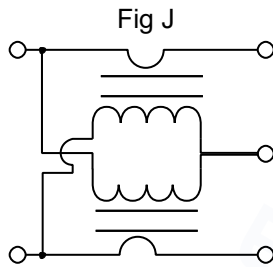
5-1000MHz



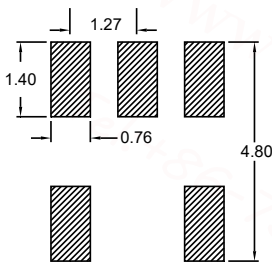
Outline Drawing(mm)



Electrical structure



Recommended layout(mm)



Pin Connections

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

Features

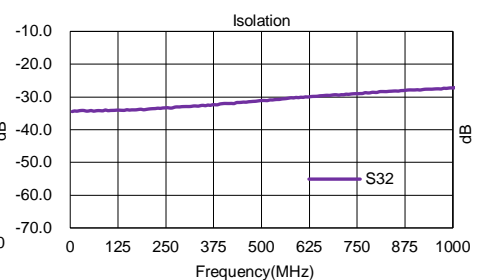
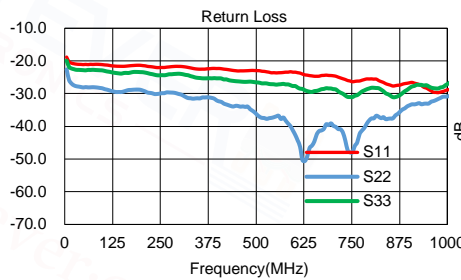
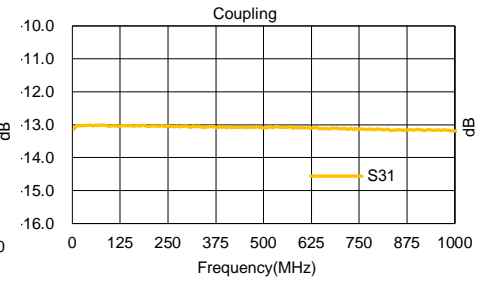
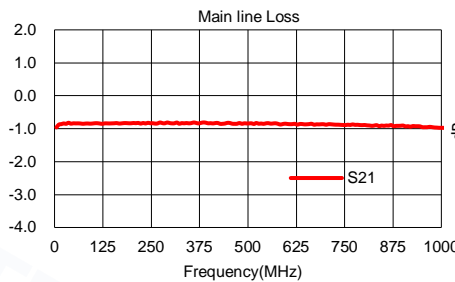
- Operating temperature range: -40 C to +85 C
- Storage temperature range: -55 C to +100 C
- 260°C Reflow Compatible
- RoHS Compliant and Lead free
- Input Power:1.0 W Max
- DC Current: 30 mA Max

Applications

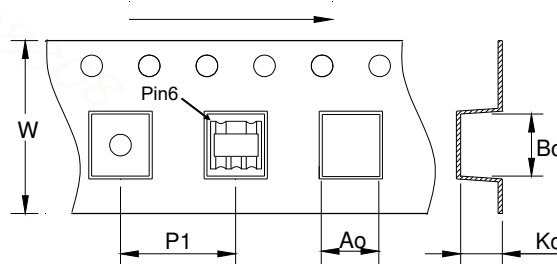
- FFor Docsis 3.0 & 3.1 Cable Modem.
- For Wideband Push-pull Amplifiers.
- For CATV Amplifiers Module & Set top box.
- For CATV Optical Receivers and Amplifiers.
- For VHF/UHF Transmitters and Push-pull Amplifiers.

Electrical Specifications:

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(S31)	5-1000MHz	dB	12.5	13.0	13.5
Main line Loss(S21)	5-1000MHz	dB	—	1.0	1.50
Input Return Loss(S11)	5-1000MHz	dB	16.0	25.0	—
Coupling Return Loss(S33)	5-1000MHz	dB	16.0	25.0	—
Output Return Loss(S22)	5-1000MHz	dB	16.0	25.0	—
Isolation(S32)	5-1000MHz	dB	18.0	30.0	—
Coupling Flatness	5-1000MHz	dB	-0.90	—	0.90



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	2000
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	8.00
Ao	mm	4.80
Bo	mm	4.80
Ko	mm	3.50