

RF Directional Coupler

ECJ1801-C001030

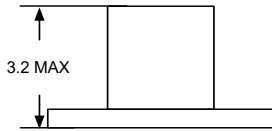
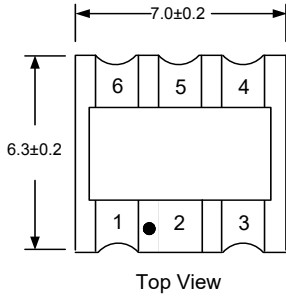
2021-05-07 Rev. 0



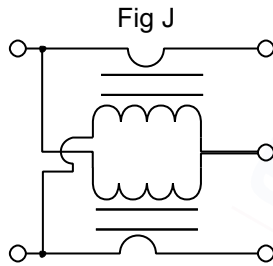
75Ω 18dB Directional Coupler

5-1200MHz

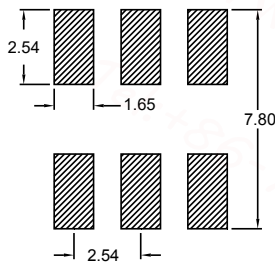
Outline Drawing(mm)



Electrical structure



Recommended layout(mm)



Pin Connections

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

Features

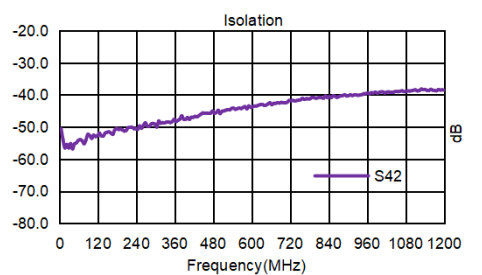
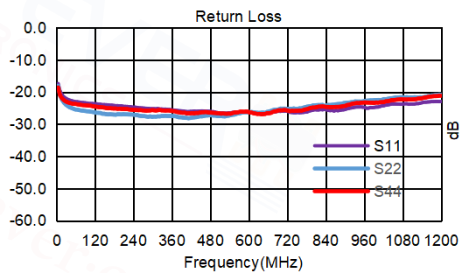
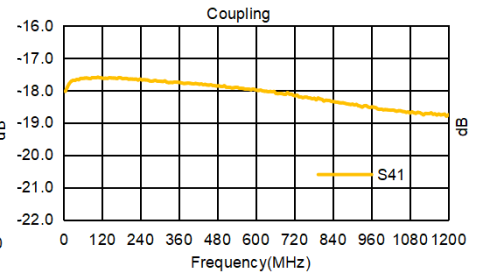
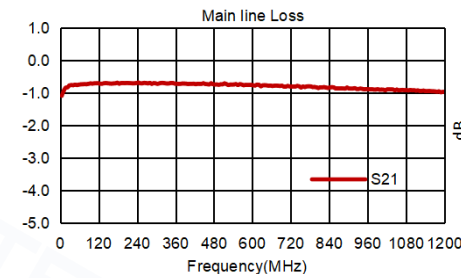
- DC Current:30 mA Max
- Input Power:250 mW Max
- 260°C Reflow Compatible
- RoHS compliant and lead free
- Operating temperature range: -40 C to+85 C
- Storage temperature range: -55 C to +100 C

Applications

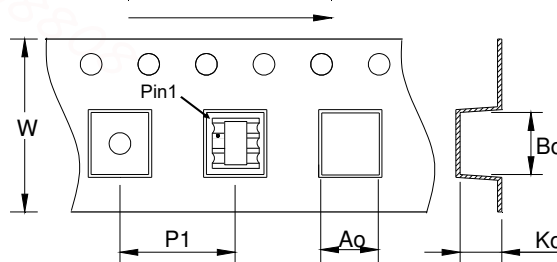
- For Docsis 3.0 & 3.1Cable Modem.
- For Wideband Push-pull Amplifiers.
- For CATV Amplifiers Module & Set top box.
- For CATV Optical Receivers and Amplifiers.
- For VHF/UHF Transmitters and Push-pull Amplifiers.

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

| Parameter | Test Conditions | Units | Min | Typ | Max |
|----------------------------|-----------------|-------|------|------|------|
| Coupling(pin1-3) | 5-1200MHz | dB | 17.0 | 18.0 | 19.0 |
| Main line Loss(pin1-6) | 5-1200MHz | dB | — | 1.0 | 1.5 |
| Input Return Loss(pin 1) | 5-1200MHz | dB | 16.0 | 20.0 | — |
| Coupling Return Loss(pin3) | 5-1200MHz | dB | 16.0 | 20.0 | — |
| Output Return Loss(pin6) | 5-1200MHz | dB | 16.0 | 20.0 | — |
| Isolation(pin3-6) | 5-1200MHz | dB | 28.0 | 40.0 | — |



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 | 4.20 |