

RF Directional Coupler

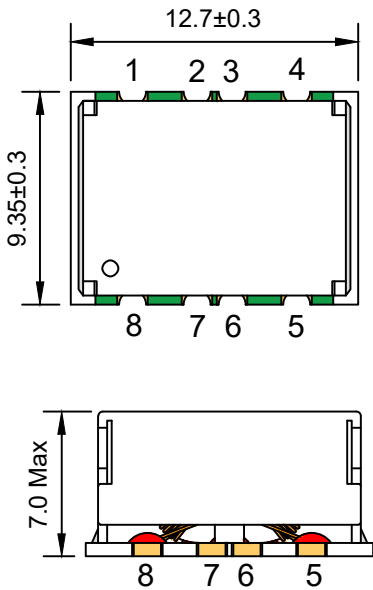
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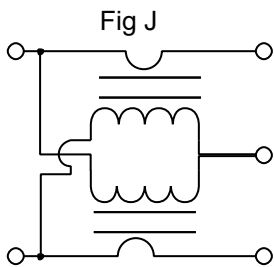
50Ω 20dB Directional Coupler

30-1000MHz

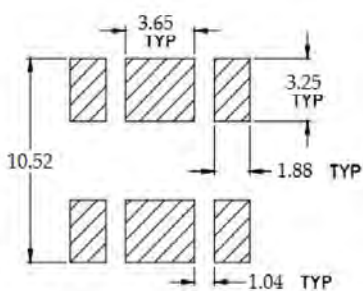
Outline Drawing(mm)



Electrical structure



Recommended layout(mm)



Pin Connections

| | |
|------------------|---------|
| INPUT | 8 |
| OUTPUT | 1 |
| COUPLED(forward) | 5 |
| COUPLED(reverse) | 4 |
| GROUND | 2,3,6,7 |

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: 10W Max

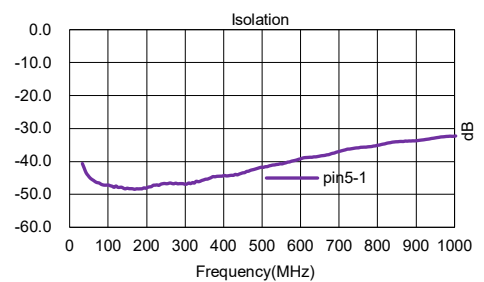
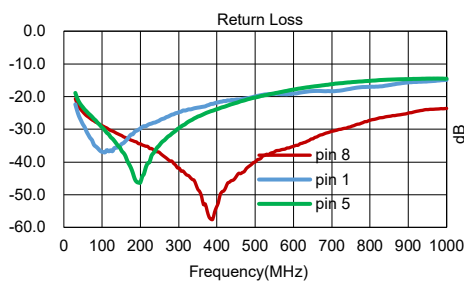
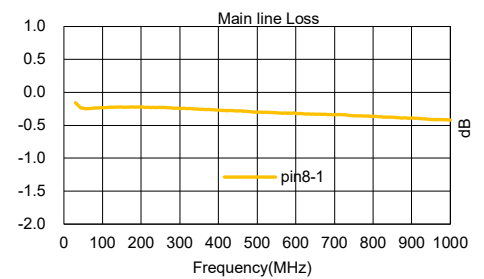
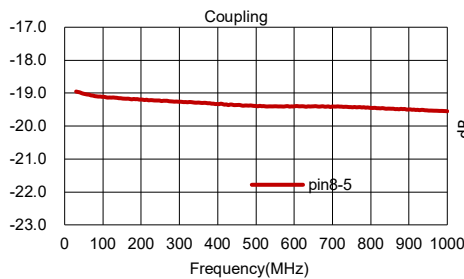
Applications

- For Motorola Walkie-talkie.
- For Car Streaming Media Rearview Mirror.
- For Broadband and Wireless Communications.
- For Wireless Microphone & Marine Communications.
- For Ideally Suited LTE, Cellular, UMTS, WiFi, WiMAX.
- For Differential Modulator/demodulator and Active Mixers.

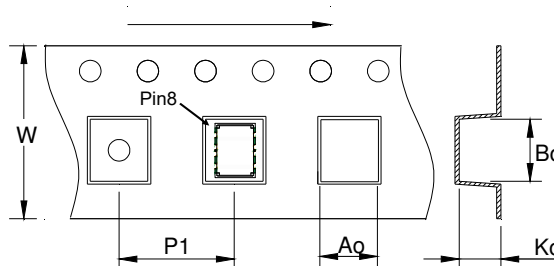


Electrical Specifications: TA=25 °C, 0dBm, Z0=50Ω

| Parameter | Test Conditions | Units | Min | Typ | Max |
|----------------------------|-----------------|-------|------|------|------|
| Coupling(pin8-5) | 30-1000MHz | dB | 19.0 | 20.0 | 21.0 |
| Main line Loss(pin8-1) | 30-1000MHz | dB | — | 0.50 | 0.65 |
| Input Return Loss(pin 8) | 30-1000MHz | dB | 16.0 | 20.0 | — |
| Coupling Return Loss(pin5) | 30-1000MHz | dB | 14.0 | 16.0 | — |
| Output Return Loss(pin1) | 30-1000MHz | dB | 14.0 | 16.0 | — |
| Isolation(pin5-1) | 30-1000MHz | dB | 34.0 | 38.0 | — |



Carrier Tape Orientation



Tape & Reel Information

| Parameter | Units | Value |
|--------------|-------|-------|
| Qty per reel | PCS | 250 |
| Reel Size | mm | 330 |
| Tape Width | mm | 24.00 |
| Pitch | mm | 16.00 |
| Ao | mm | 12.30 |
| Bo | mm | 15.50 |
| Ko | mm | 7.40 |

