

# RF Directional Coupler

## ECJ2001-B092020

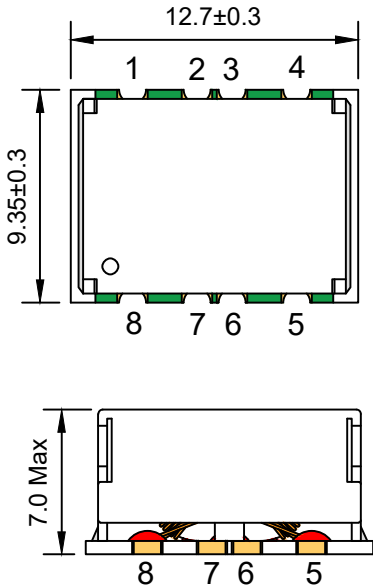
2023-12-20 Rev. 0



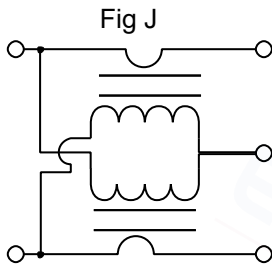
50Ω 20dB Directional Coupler

30-1000MHz

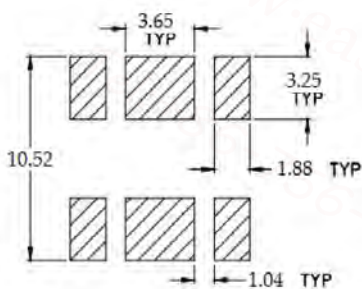
### Outline Drawing(mm)



### Electrical structure



### Recommended layout(mm)



### Pin Connections

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

### Features

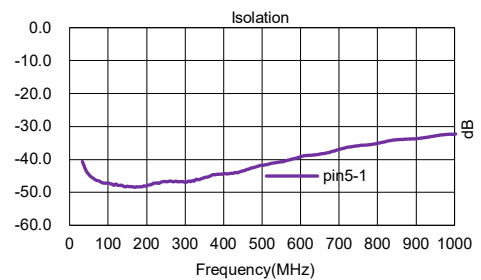
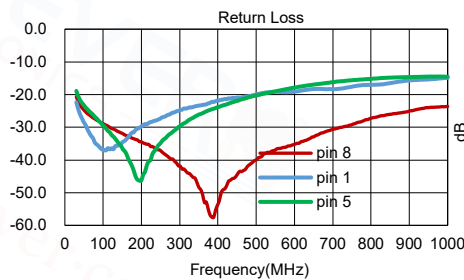
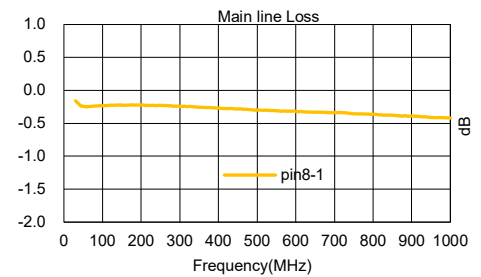
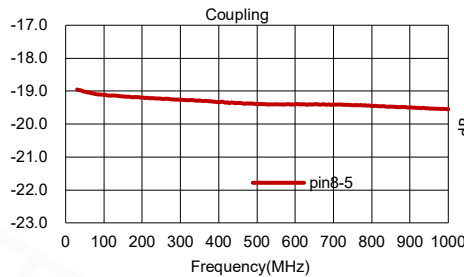
- Operating temperature range: -40°C to +85°C
- Storage temperature range: -55°C to +100°C
- 260°C Reflow Compatible
- RoHS compliant and lead free
- Input Power: 10W Max

### Applications

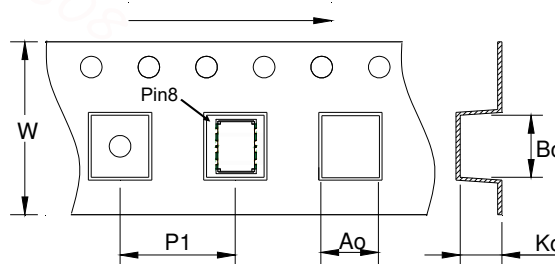
- For Motorola Walkie-talkie.
- For Car Streaming Media Rearview Mirror.
- For Broadband and Wireless Communications.
- For Wireless Microphone & Marine Communications.
- For Ideally Suited LTE, Cellular, UMTS, WiFi, WiMAX.
- For Differential Modulator/demodulator and Active Mixers.

### 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