

RF Directional Coupler

ECJ1001-D009938

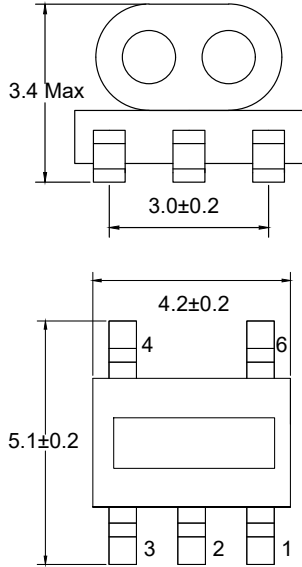
2024-05-25 Rev. 0



50Ω 10dB Directional Coupler

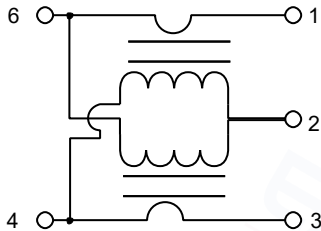
5-1000MHz

Outline Drawing(mm)

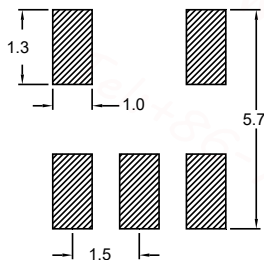


Electrical structure

Fig J



Recommended layout(mm)



Pin Connections

Input	3
Coupling	1
Output	4
Ground	2
External 50 Ω	6

Features

- RF Power, 0.25W Max
- DC Current, 30mA Max
- Operating temperature range:-40℃ to +85℃
- Storage temperature range: -55℃ to +100℃
- 260℃ Reflow Compatible
- RoHS compliant and lead free

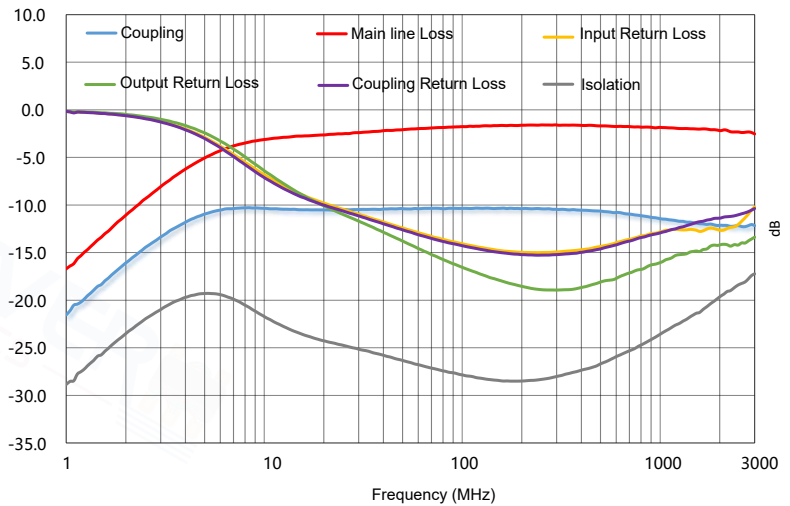
Equivalent to: B4F #617PS-1660=P3

Applications

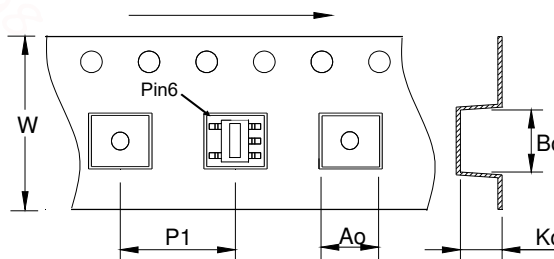
- For Motorola Walkie-talkie.
- For Car Streaming Media Rearview Mirror.
- For Broadband and Wireless Communications.
- For Wireless Microphone & Marine Communications.
- For Ideally Suited LTE, Cellular, UMTS, WiFi, WiMAX.
- For Differential Modulator/demodulator and Active Mixers.

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

Parameter	Test Conditions	Units	Min	Typ	Max
Coupling(Pin1-Pin3)	5-1000MHz	dB	9.5	10.5	11.5
Main line Loss(Pin1-Pin5)	5-1000MHz	dB	—	1.5	2.5
Input Return Loss(Pin1)	5-1000MHz	dB	—	14.0	—
Coupling Return Loss(Pin3)	5-1000MHz	dB	—	14.0	—
Output Return Loss(Pin5)	5-1000MHz	dB	—	13.0	—
Isolation(Pin3-5)	5-1000MHz	dB	16.0	25.0	—



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	2000
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Ao	mm	5.70
Bo	mm	4.50
Ko	mm	3.60