

RF Balun Transformer

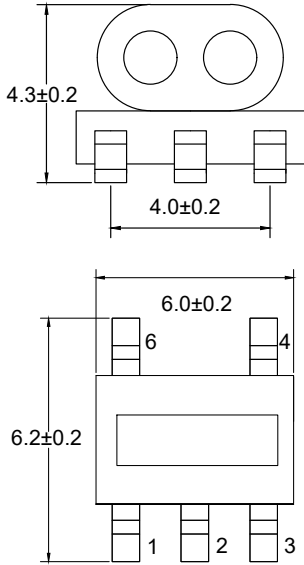
EBB0303-G010367

2025-01-14 Rev. 1

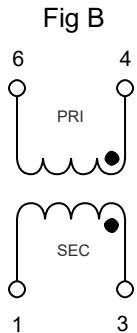


50Ω 1:1 Flux Coupled Transformer 1.8-30 MHz

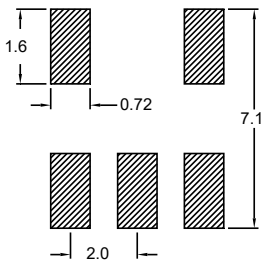
Outline Drawing(mm)



Electrical structure



Recommended layout(mm)



Pin Connections

Input	4
Output 1	3
Output 2	1
Ground	6

Features

- Input Power: 6W Max
- DC Current: 500mA Max
- 260°C Reflow Compatible
- RoHS compliant and lead free
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -40°C to +125°C

Applications

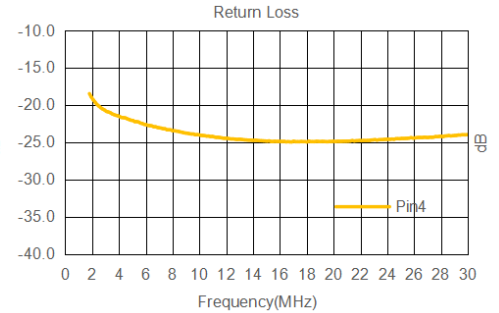
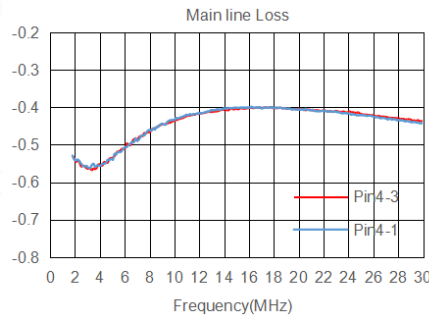
- For Motorola Walkie-talkie.
- For Car Streaming Media Rearview Mirror.
- For Broadband and Wireless Communications.
- For Wireless Microphone & Marine Communications.
- For Ideally Suited LTE, Cellular, UMTS, WiFi, WiMAX.
- For Differential Modulator/demodulator and Active Mixers.

Windings

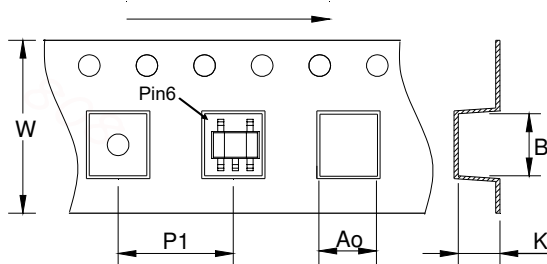
Winding	Wire	Start	Turns	End
4-6	FIW4 0.18-Y	4	3.0	6
1-3	FIW4 0.18-R	1	3.0	3

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

Parameter	Test Conditions	Units	Min	Typ	Max
Main line Loss (Pin4-3)	1.8-30MHz	dB	—	0.5	1.0
Main line Loss (Pin4-1)	1.8-30MHz	dB	—	0.5	1.0
Input Return Loss(Pin4)	1.8-30MHz	dB	16.0	20.0	—
Inductance Pin1-3orPin4-6	2MHz	uH	12.0	20.0	30.0
Leakage Inductance	2MHz/0.1V	nH	—	—	70.0
DCR Pin1-3orPin4-6	@25°C	mΩ	—	22.0	80.0
IDC	1KHz/1V	mA	500	—	—
Stray capacitance between windings		pF	—	—	2.0
HI-POT	DC500V/1S				



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	1000
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	12.00
Ao	mm	7.20
Bo	mm	7.50
Ko	mm	4.90