SKYFR-001118: 746—768 MHz Single Junction Robust Lead Isolator

Applications

- Wireless infrastructure
- Power amplifiers

Features

- Surface mount package
- Operating frequency range: 746 to 768 MHz
- BeO free
- RoHS compliant
- Shipped in Tape & Reel

2 ———— CCW ———— 1

3dB

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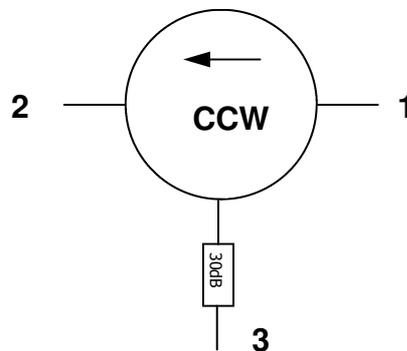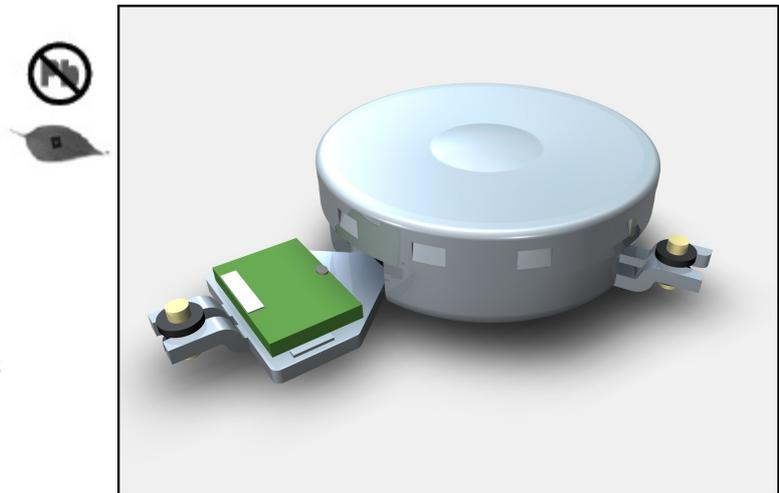
Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Average power	P_{AVG}			200	W
Reverse power	P_{REV}			80	W
Peak power	P_{PK}			800	W
Operating temperature range	T_{OP}		-40	+105	°C
Storage temperature range	T_{STOR}		-55	+125	°C

Note: Exceeding any of the limits listed here may result in permanent damage to the device or may reduce device reliability.

Table 2. Electrical Specifications (Note 1)

Parameter	Symbol	Test Condition	Min	Typical	Max	Units
Frequency range	f		746		768	MHz
Impedance				50		Ω
Insertion loss	IL				0.25	dB
Isolation	ISO		20	23		dB
Directivity		Port 1 to port 3	55	56		dB
Return loss	RL		20	23		dB
Attenuation			29	30	31	dB
Return loss, out of band	RL	726MHz—776MHz	16	18		dB
Intermodulation distortion (Note 2)	IMD	2 x 50W CW tones, 5MHz spacing			-70	dBc

Note 1: Performance is guaranteed under the conditions listed in this table and over the operating temperature range.
Note 2: See Skyworks Application Note, *Intermodulation Distortion Measurements of Ferrites*, document number 201537 for further details.

Table 3. Plating Specification

Section	Base Material	Plating
Pins	Brass	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-001118	TBA

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SOLDER PATTERN
NOTE: Use plated thru vias (Ø0.3) under unit for heat dissipation.
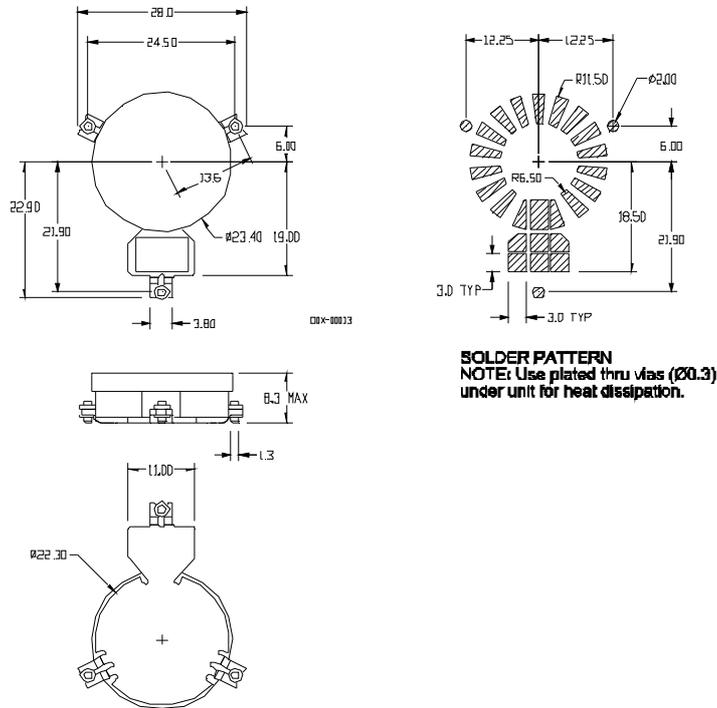
All dimensions in millimeters.
Tolerance: ±0.2mm unless otherwise specified.
Coplanarity specification: 0.1mm maximum.
Model number, lot code and port designation printed on top side of device.

Figure 2. Package Dimensions and Recommended PCB Layout

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