

SPECIFICATION SHEET

SKYFR-001214: 1805—2170 MHz Single Junction Robust Lead Isolator

Applications

- Wireless infrastructure
- Power amplifiers

Features

- Surface mount package
- Operating frequency range: 1805 to 2170 MHz
- BeO free
- RoHS compliant
- Shipped in Tape & Reel

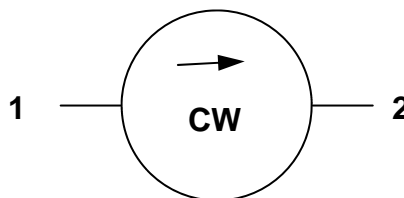
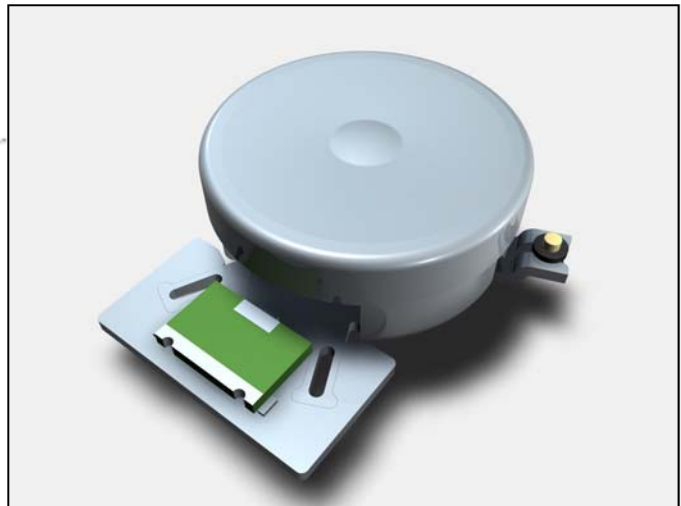


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Average power	P_{AVG}			70	W
Reverse power	P_{REV}			70	W
Peak power	P_{PK}			200	W
Operating temperature range	T_{OP}		-40	+90	°C
Storage temperature range	T_{STOR}		-40	+130	°C

Note: The power rating and reliability of the device will not degrade with an operating temperature of up to +110°C. Exceeding +110°C or any of the limits listed here may result in permanent damage to the device or may reduce device reliability.

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Table 2. Electrical Specifications (Note 1)

Parameter	Symbol	Test Condition	Min	Typical	Max	Units
Frequency range	f		1805		2170	MHz
Impedance				50		Ω
Impedance, Real			43		57	Ω
Impedance, Imaginary			-j6		+j9	Ω
Insertion loss	IL				0.30	dB
Isolation	ISO		20			dB
Return loss	RL		22	24		dB
Group Delay					2	nS
Out of band resonance			290			MHz
Harmonic Attenuation, 2nd			10			dB
Harmonic Attenuation, 3rd			3			dB
Intermodulation distortion (Note 2)	IMD	2 x 15W CW tones, 5MHz spacing	65			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.

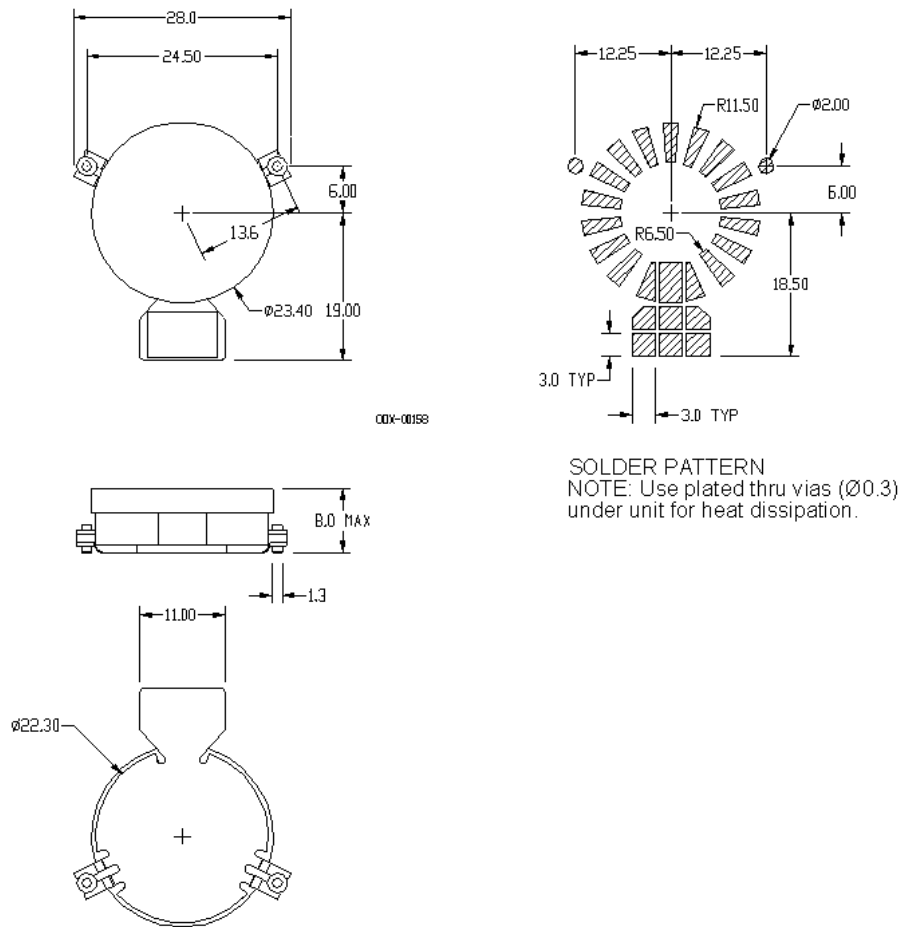
Table 3. Plating Specification

Section	Base Material	Plating
Pins	Brass	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-001214	TFX-00021

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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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