

SPECIFICATION SHEET

SKYFR-001056: 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

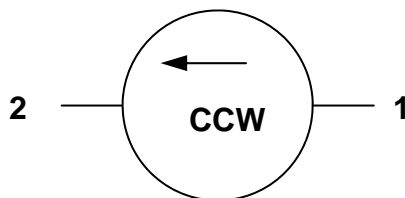
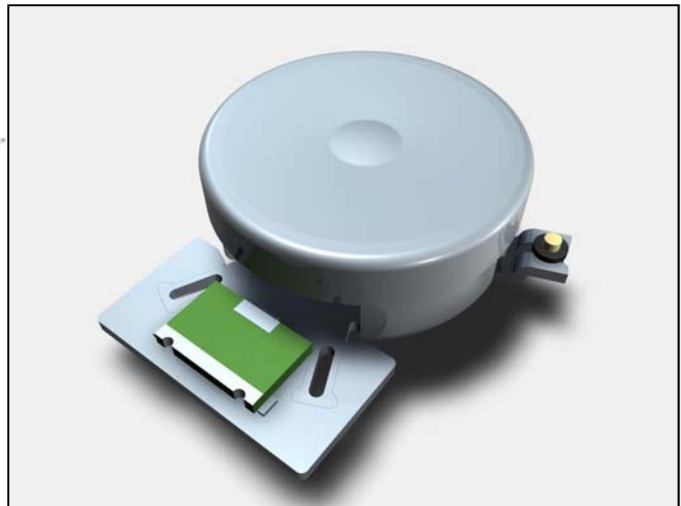


Figure 1. Block Diagram

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
Isolation	ISO	1740MHz—2260MHz	15			dB
Return loss	RL		20			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	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.

Note 3: Performance will not degrade by >10% with an operating temperature of up to +100°C

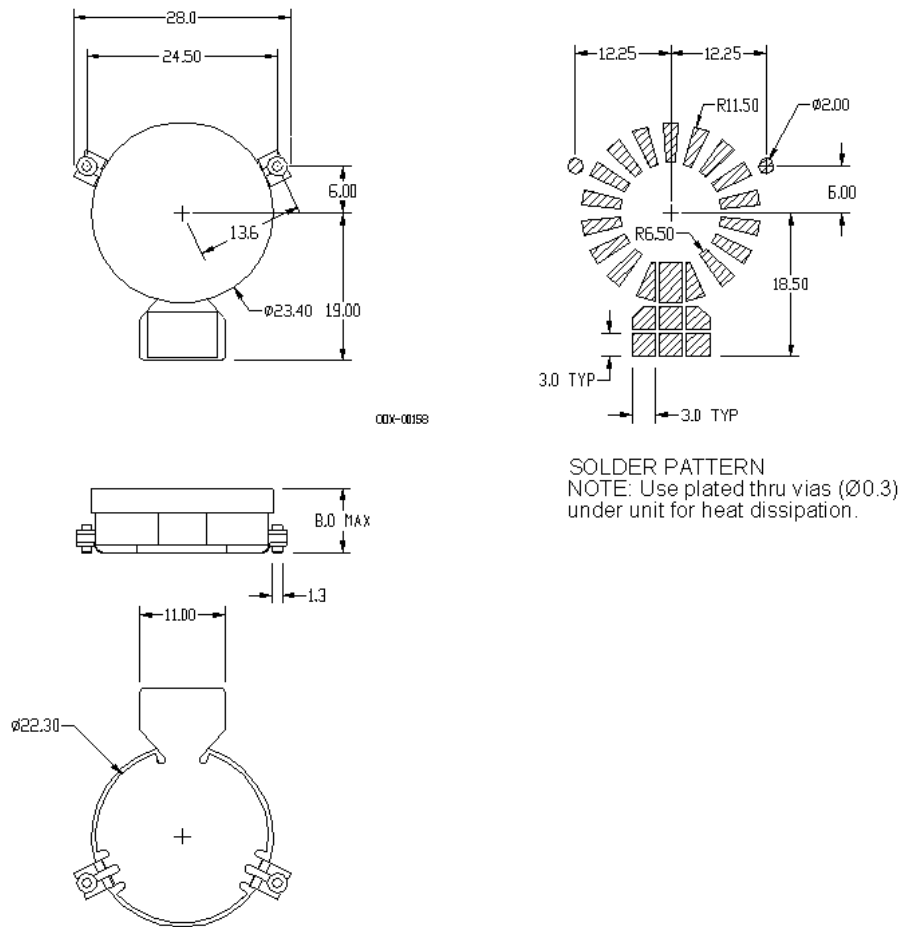
Table 3. Plating Specification

Section	Base Material	Plating
Pins	Brass	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-001056	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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