

**SPECIFICATION SHEET**

# SKYFR-000903: 758—793 MHz Single Junction Robust Lead Isolator

**Applications**

- Wireless infrastructure
- Power amplifiers

**Features**

- Small surface mount package
- Operating frequency range: 758 to 793 MHz
- BeO free
- RoHS compliant

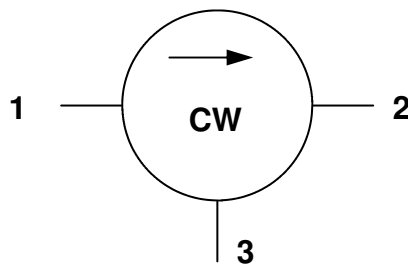
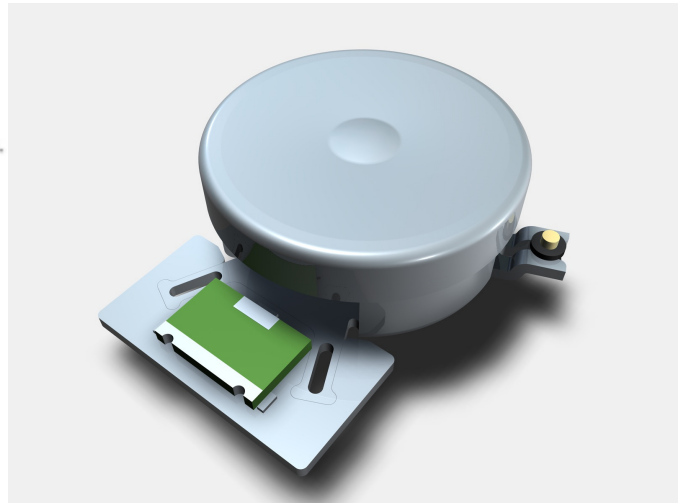


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Average power	$P_{AVG}$			200	W
Reverse power	$P_{REV}$			100	W
Peak power	$P_{PK}$			500	W
Operating temperature range	$T_{OP}$		-40	+100	°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		758		793	MHz
Impedance				50		$\Omega$
Insertion loss	IL				0.25	dB
Insertion loss ripple		Peak to peak			0.10	dB
Isolation	ISO		18			dB
Return loss	RL	Port 1 and 2, 758MHz—793MHz	18			dB
Return loss	RL	Port 1, 743MHz—808MHz	16			dB
Phase flatness					0.2	Degree
Harmonics		100W @ port 1			-59	dBc
Intermodulation distortion (Note 2)	IMD	2 x 31W CW tones, 5MHz spacing	74			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.

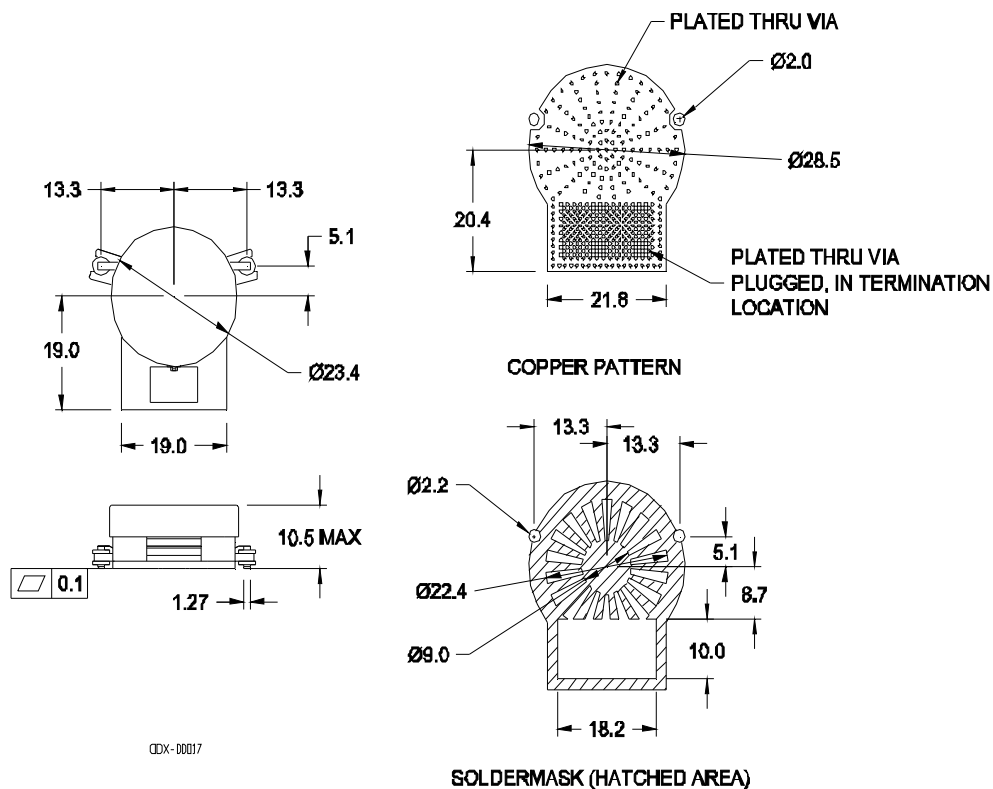
**Note 3:** Test fixture PCB material is RO3006, 0.65mm thick, with a 50 $\Omega$  line width of 0.9mm.

**Table 3. Plating Specification**

Section	Base Material	Plating
Pins	Bronze	Gold
Housing	Steel	Silver

**Table 4. Ordering Information**

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-000903	TBA



All dimensions in millimeters.

Tolerance:  $\pm 0.2\text{mm}$  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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