

SPECIFICATION SHEET

SKYFR-000883: 1880—1920 MHz Single Junction Robust Lead Circulator

Applications

- Wireless infrastructure
- Power amplifiers



Features

- Small surface mount package
- Operating frequency range: 1880 to 1920 MHz
- BeO free
- RoHS compliant
- Very low insertion loss

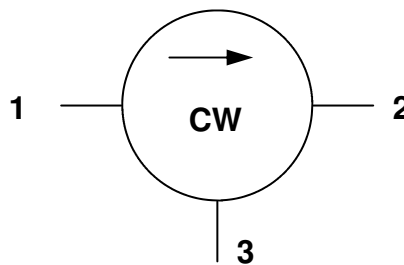
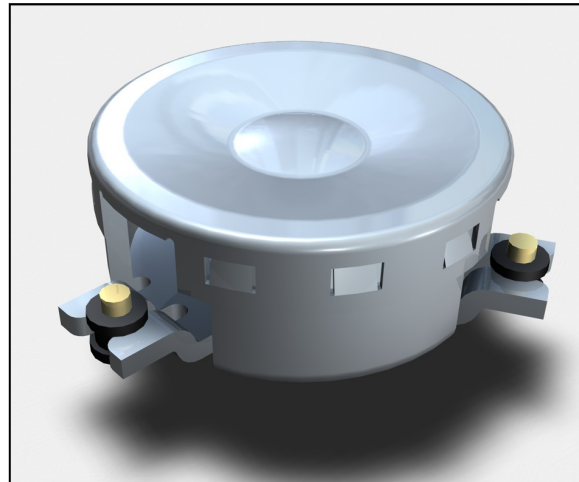


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Average power	P_{AVG}			200	W
Peak power	P_{PK}			650	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.

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Table 2. Electrical Specifications (Note 1)

Parameter	Symbol	Test Condition	Min	Typical	Max	Units
Frequency range	f		1880		1920	MHz
Impedance				50		Ω
Insertion loss	IL	Port 1 to 2, port 2 to 3, port 3 to 1		0.20	0.25	dB
Isolation	ISO	Port 2 to 1, port 3 to 2, port 1 to 3	23			dB
Return loss	RL	All ports	23			dB
Return loss	RL	1845MHz—1955MHz, all ports	20			dB
Intermodulation distortion (Note 2)	IMD	2 x 50W CW tones, 5MHz spacing	75			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.

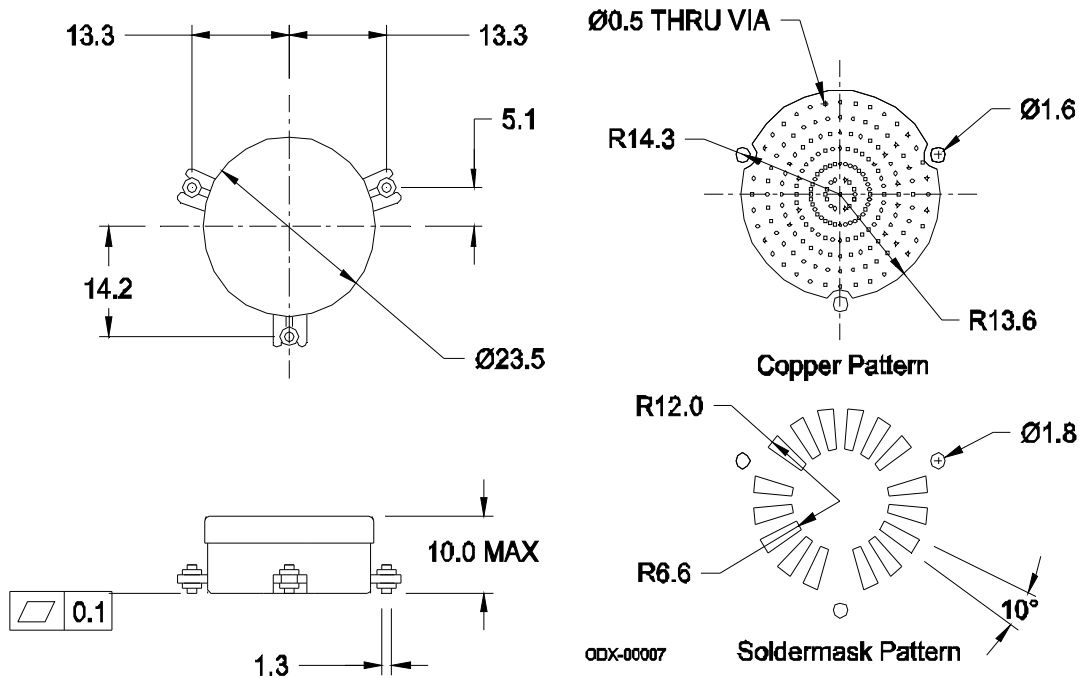
Table 3. Plating Specification

Section	Base Material	Plating
Pins	Bronze	Gold
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-000883	TFX-00052

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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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