

SPECIFICATION SHEET

SKYFR-001205: 3400—3600 MHz Single Junction Robust Lead Circulator

Applications

- Wireless infrastructure
- Power amplifiers

Features

- Small surface mount package
- Operating frequency range: 3400 to 3600 MHz
- BeO free
- RoHS compliant
- Tape & Reel

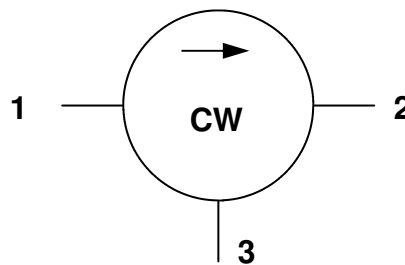
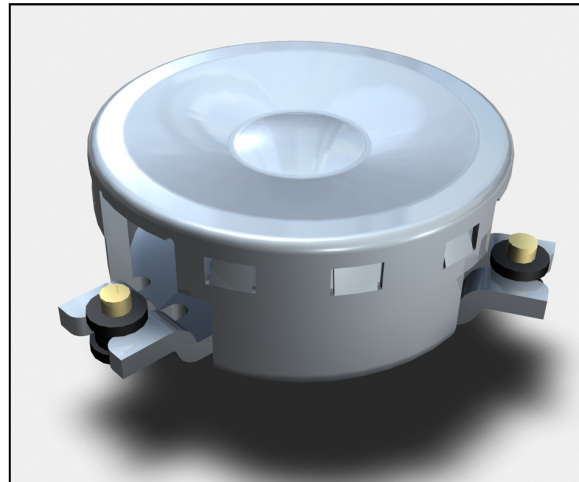


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Average power	P_{AVG}			80	W
Peak power	P_{PK}			500	W
Operating temperature range	T_{OP}		-40	+105	°C
Extended operating temperature range	T_{EXT}		+105	+125	°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		3400		3600	MHz
Impedance				50		Ω
Insertion loss	IL				0.30	dB
Insertion loss	IL	Over extended operating temperature range			0.35	dB
Insertion loss ripple	IL				0.10	dB
Isolation	ISO		25			dB
Isolation	ISO	Over extended operating temperature range	20			dB
Return loss	RL		25			dB
Return loss	RL	Over extended operating temperature range	20			dB
Intermodulation distortion (Note 2)	IMD	2 x 41.5dBm CW tones, 5 MHz spacing	68			dBc
Harmonic product generation		1 x 44.5dBm CW tone			-56	dBc
Harmonics, 3rd			5			dB
Flatness vs frequency					1.0	degree

Note 1: Performance is guaranteed under the conditions listed in this table and over the operating temperature range.

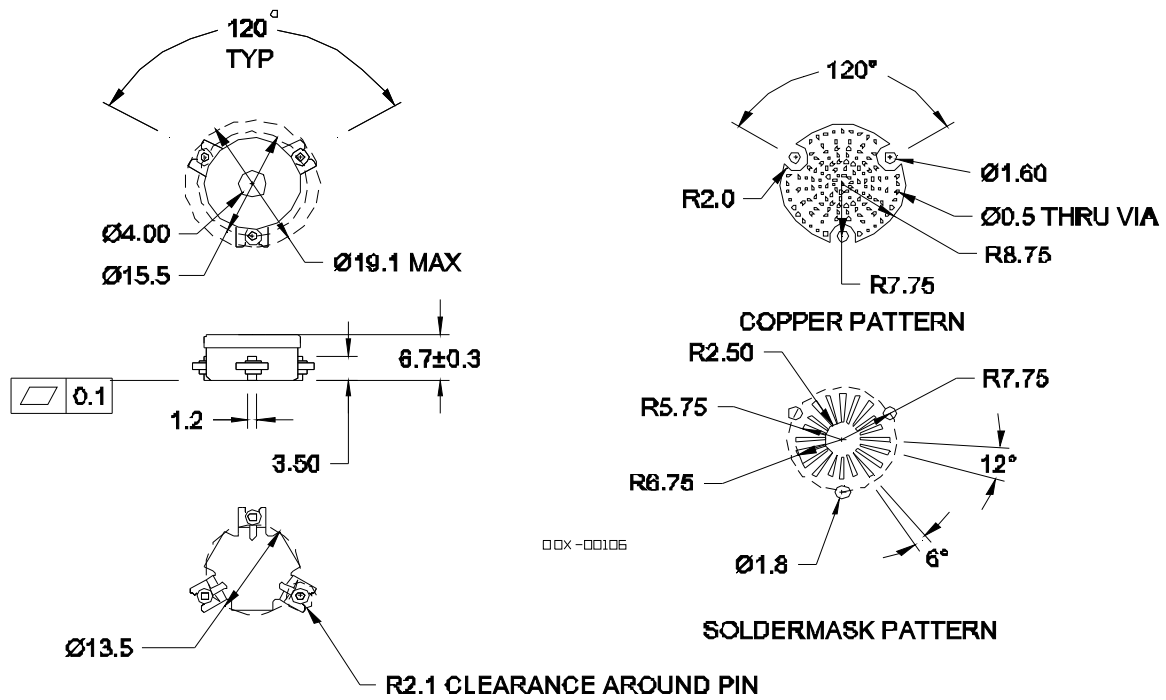
Note 2: See Skyworks Application Note, *Intermodulation Distortion Measurements of Ferrites*, document number 201537 for further details.

Table 3. Plating Specification

Section	Base Material	Plating
Pins	Bronze	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-001205	MAFX-000015-RL00FR (PCB-00113)

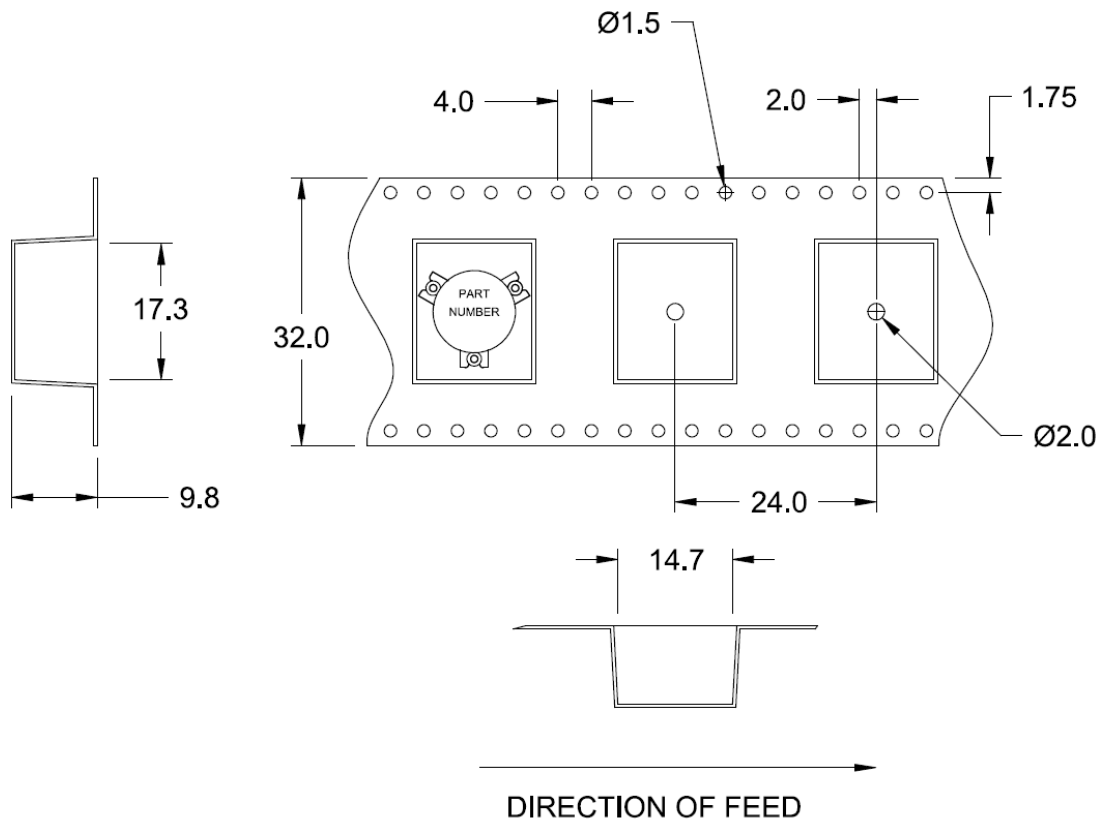


NOTE: Unit marking is on a high tempertuare label on top of cover.

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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All dimensions in millimeters.
 Tolerance: $\pm 0.2\text{mm}$ unless otherwise specified.
 Carrier tape: Black conductive polycarbonate or polystyrene.
 Reel size: 13"
 Quantity per reel: 200

Figure 3. Tape and Reel Dimensions

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