

# SKYFR-000774: 758—768 MHz Single Junction Robust Lead Circulator

## Applications

- Wireless infrastructure
- Power amplifiers



## Features

- Small surface mount package
- Operating frequency range: 758 to 768 MHz
- BeO free
- RoHS compliant

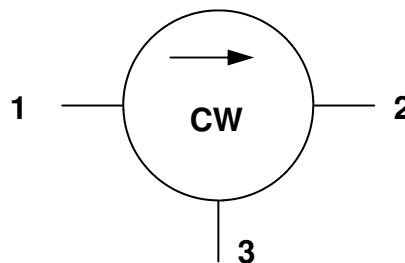
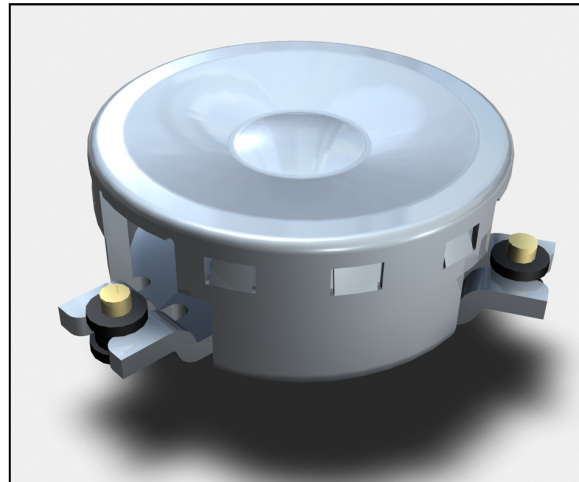


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Average power	$P_{AVG}$			200	W
Peak power	$P_{PK}$			500	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.

**Table 2. Electrical Specifications (Note 1)**

Parameter	Symbol	Test Condition	Min	Typical	Max	Units
Frequency range	f		758		768	MHz
Impedance				50		Ω
Insertion loss	IL				0.30	dB
Isolation	ISO		22			dB
Return loss	RL		22			dB
Intermodulation distortion (Note 2)	IMD	2 x 25W CW tones, 5MHz spacing	60			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.

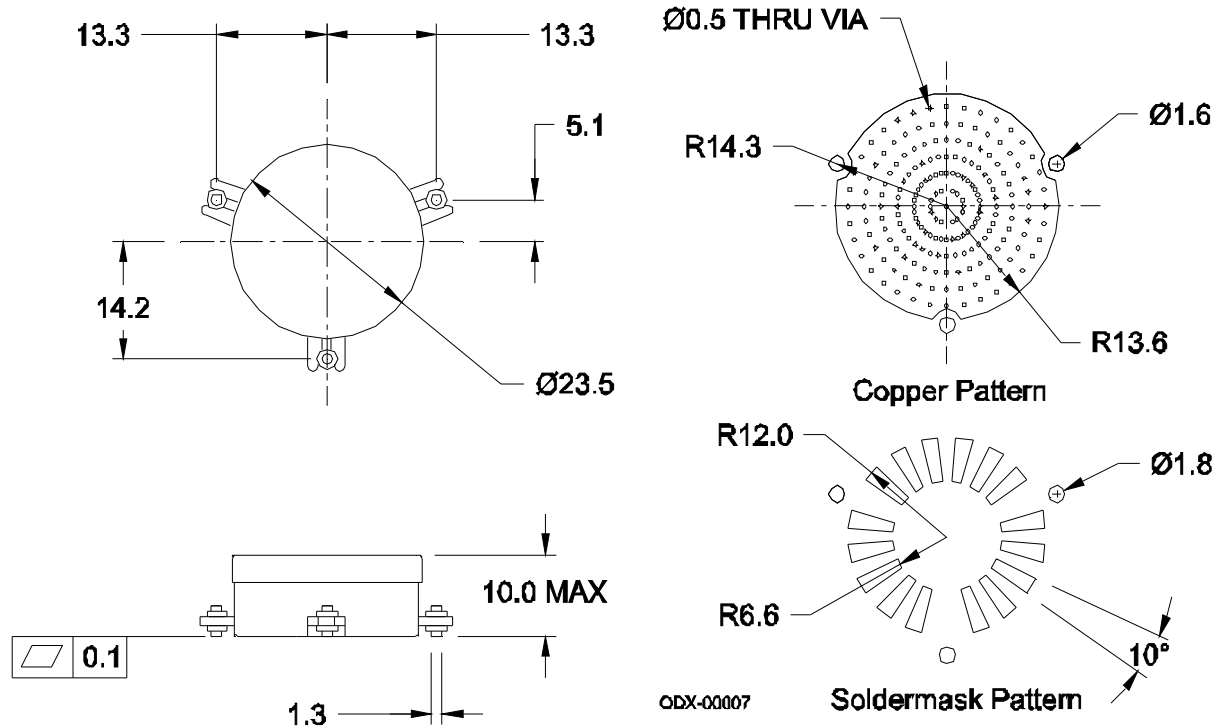
**Table 3. Plating Specification**

Section	Base Material	Plating
Pins	Bronze	Gold
Housing	Steel	Silver

**Table 4. Ordering Information**

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-000774	MAFX-000025-RL00FR

**SPECIFICATION SHEET • SKYFR-000774**



All dimensions in millimeters.  
 Tolerance:  $\pm 0.2\text{mm}$  unless otherwise specified.  
 Coplanarity specification: 0.1mm maximum.  
 Model number, lot code and part designation printed on top side of device.  
 Recommended PCB material RO4350B, track width is 1.6mm with 1.25 gap on each side.

**Figure 2. Package Dimensions and Recommended PCB Layout**

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