

SPECIFICATION SHEET

# SKYFR-001284: 1805—2170 MHz Single Junction Robust Lead Isolator

## Applications

- Wireless infrastructure
- Power amplifiers



## Features

- Very small surface mount package
- Operating frequency range: 1805 to 2170 MHz
- BeO free
- RoHS compliant
- Tape & Reel

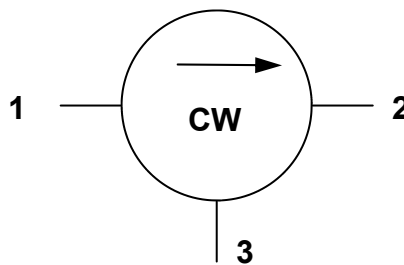
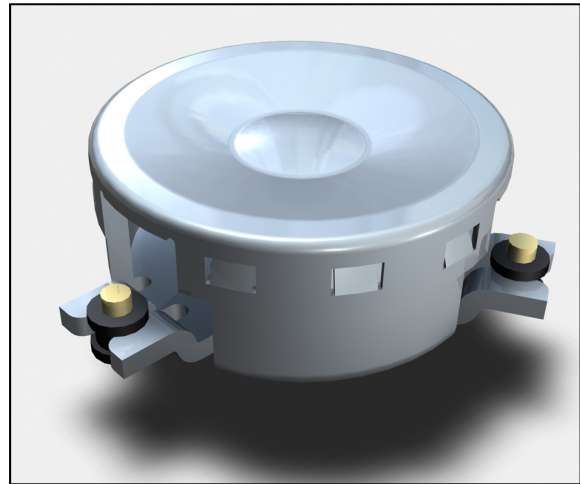


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Average power	$P_{AVG}$			20	W
Peak power	$P_{PK}$			120	W
Reverse power				4	W
Operating temperature range	$T_{OP}$		-40	+90	°C
Storage temperature range	$T_{STOR}$		-55	+125	°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.

**SPECIFICATION SHEET • SKYFR-001284**

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

Parameter	Symbol	Test Condition	Min	Typical	Max	Units
Frequency range	f		1805		2170	MHz
Impedance				50		$\Omega$
Impedance, input, real			36	50	69	$\Omega$
Impedance, input, imaginary			-j16		j16	j $\Omega$
Insertion loss	IL				0.5	dB
Isolation	ISO		17			dB
Isolation	ISO	1740—2260 MHz	12			dB
Return loss	RL		17			dB
Group Delay					2.0	ns
Group Delay Variation					1.0	ns
2nd harmonic attenuation			10			dB
3rd harmonic attenuation			5			dB
Intermodulation distortion (Note 2)	IMD	2 x 15W CW tones, 5MHz spacing	55			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 +110°C.

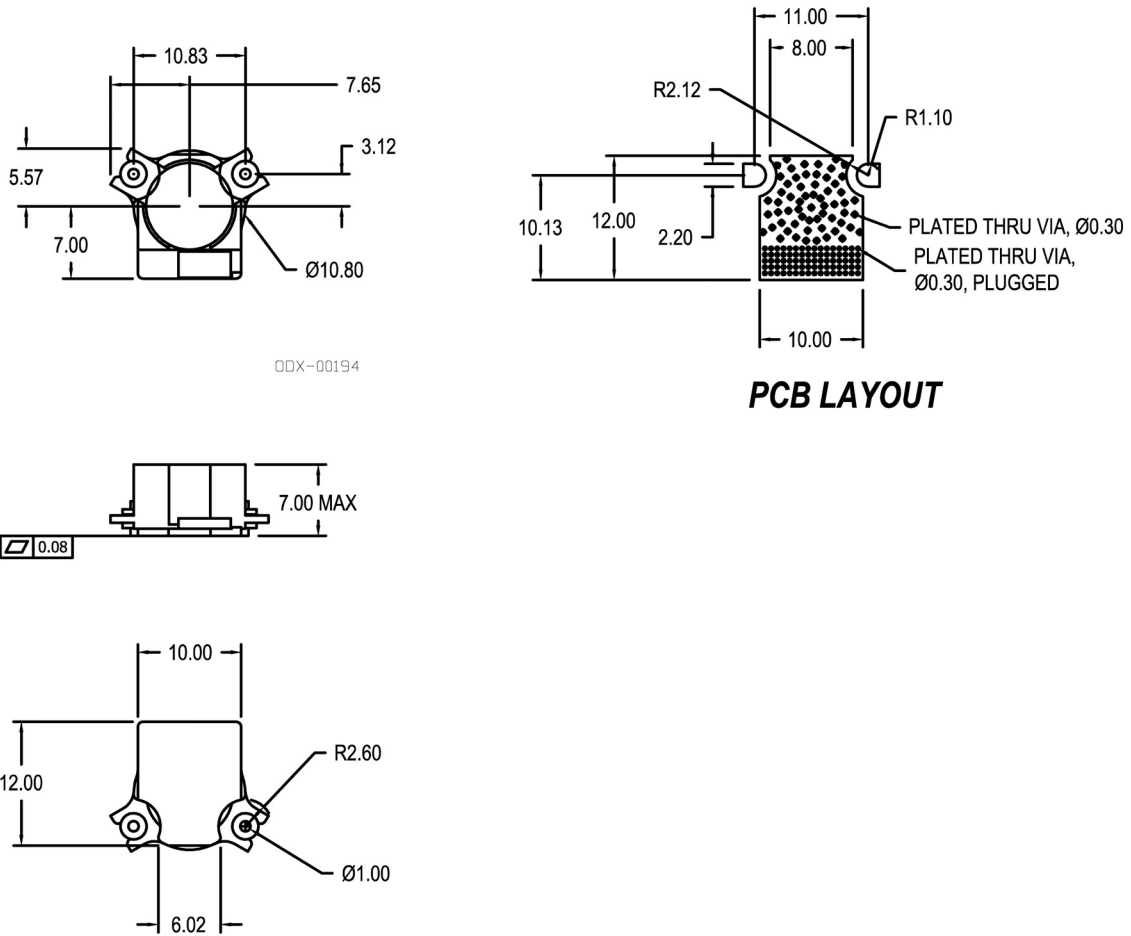
**Table 3. Plating Specification**

Section	Base Material	Plating
Pins	Brass	Silver
Housing	Steel	Silver

**Table 4. Ordering Information**

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-001284	TFX-00065

**SPECIFICATION SHEET • SKYFR-001284**



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.

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

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