

DATA SHEET

SKYFR-000855: 1930-1995 MHz Single Junction Robust Lead Isolator

Applications

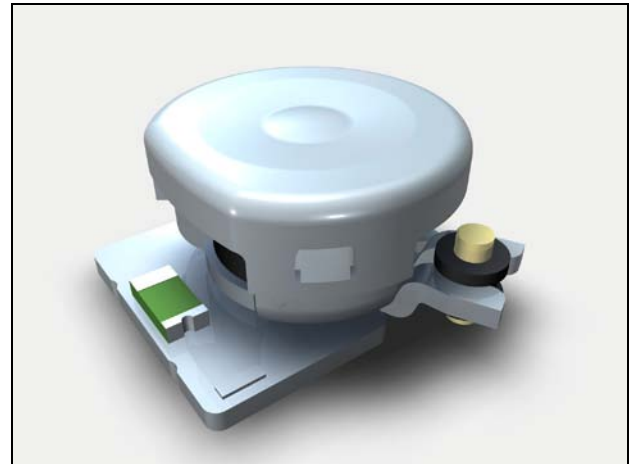
- Wireless infrastructure
- Power amplifiers

Features

- BeO free
- Small, surface mount package
- Operating frequency range: 1930 MHz to 1995 MHz
- Parts delivered on tape and reel



Skyworks Green™ products are compliant with all applicable legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green™*, document number SQ04-0074.



Description

The SKYFR-000855 is a single-junction, surface mount isolator designed for wireless infrastructure applications. It operates over the frequency range of 1930 MHz to 1995 MHz. Insertion loss is less than 0.30 dB over an operating temperature range of $-40\text{ }^{\circ}\text{C}$ to $+100\text{ }^{\circ}\text{C}$.

The SKYFR-000855 comes in an industry-standard surface mount package and is designed for automated SMT placement.

A block diagram of the SKYFR-000855 is shown in Figure 1. The absolute maximum ratings of the SKYFR-000855 are provided in Table 1.

Electrical specifications are provided in Table 2. Plating information is shown in Table 3. Figure 2 shows the package dimensions, and Figure 3 provides the tape and reel dimensions.

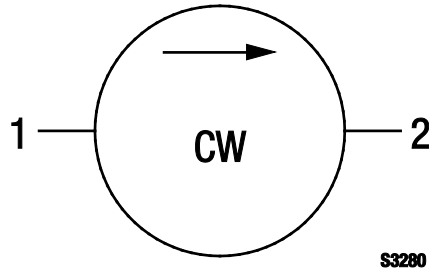


Figure 1. SKYFR-000855 Block Diagram

Table 1. SKYFR-000855 Absolute Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Units
Average power	PAVG		50	W
Peak power	PPK		200	W
Forward reverse power	PR		30	W
Operating temperature	TOP	-40	+100	°C
Storage temperature	TST	-55	+125	°C

Note: Exposure to maximum rating conditions for extended periods may reduce device reliability. There is no damage to device with only one parameter set at the limit and all other parameters set at or below their nominal value. Exceeding any of the limits listed here may result in permanent damage to the device.

Table 2. SKYFR-000855 Electrical Specifications (Note 1)

(TOP = -40 °C to +100 °C)

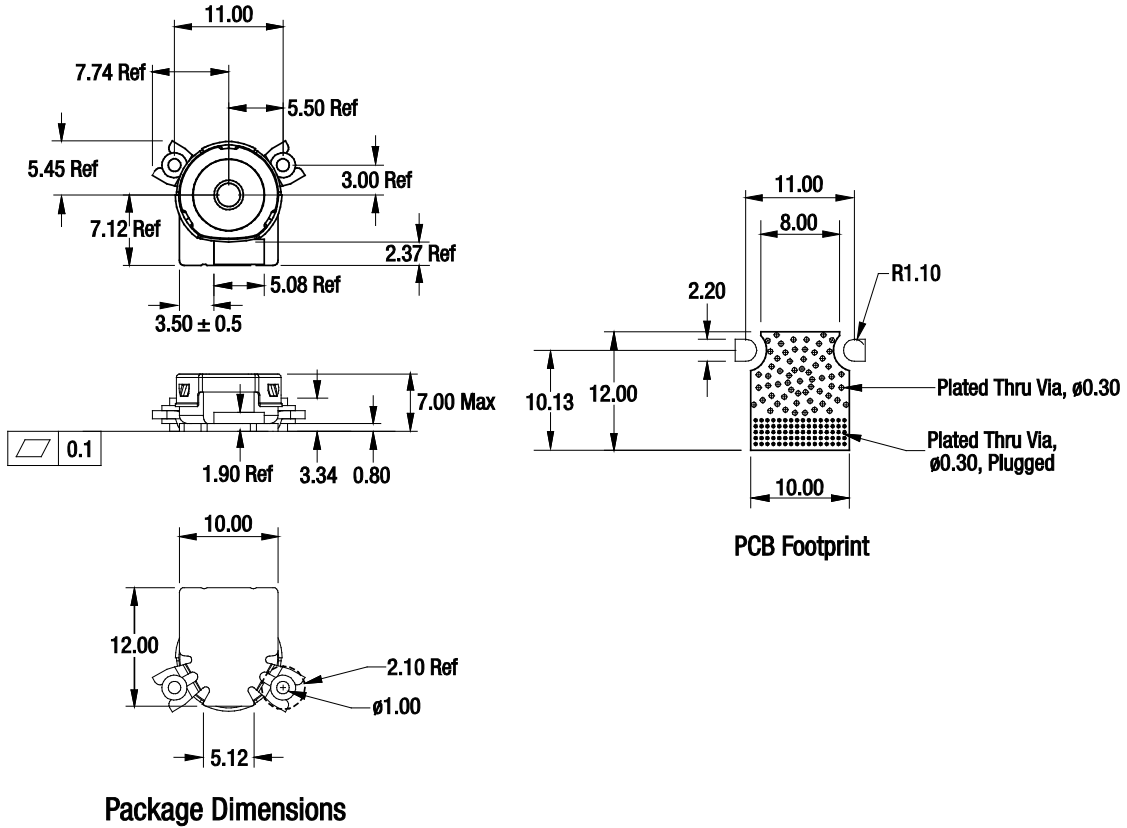
Parameter	Symbol	Test Condition	Min	Typical	Max	Units
Frequency range	f		1930		1995	MHz
Impedance				50		Ω
Insertion loss	IL				0.30	dB
Isolation	Iso		20			dB
Return loss	RL		20			dB
Intermodulation Distortion (Note 2)	IMD	2 x 15 W CW tones, 1 MHz spacing	-60			dBc
Group Delay		1930 to 1995 MHz			2.0	ns
Group delay variation		1930 to 1995 MHz			0.5	ns

Note 1: Performance is guaranteed only under the conditions listed in this Table.

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

Table 3. SKYFR-000855 Plating Specification

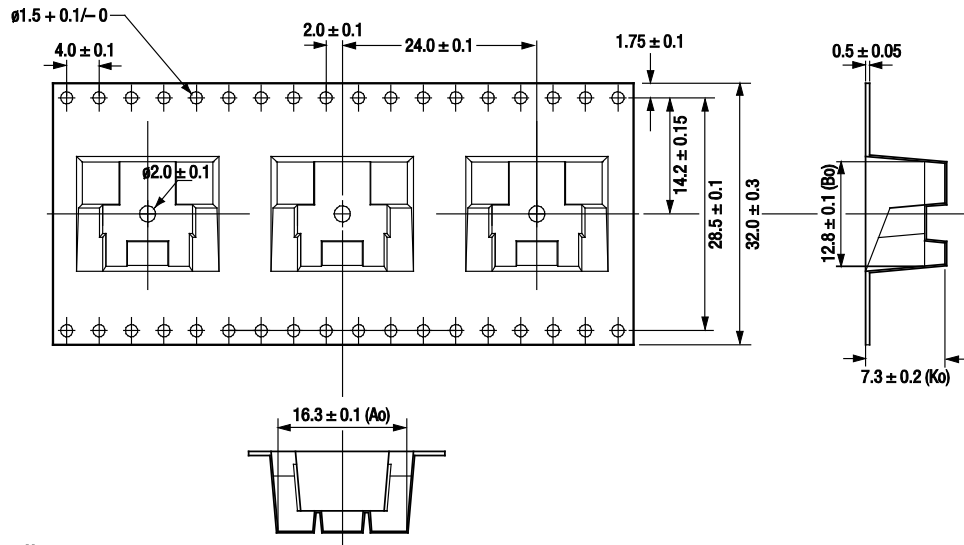
Section	Material	Plating
Pins	Bronze	Silver
Housing	Steel	Silver



All measurements are in millimeters

S3361

Figure 2. SKYFR-000855 Package Dimensions and PCB Footprint



Notes:

1. All measurements are in millimeters.
2. Ten sprocket hole pitch cumulative tolerance ± 0.2 mm.
3. Carrier camber not to exceed 1 mm in 100 mm.
4. Ao and Bo measured on a plane 0.3 mm above the bottom of the pocket.
5. Ko measured from a plane on the inside bottom of the pocket to the top surface of the carrier.

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Figure 3. SKYFR-000855 Tape and Reel Dimensions

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKYFR-000855 Single Junction Lead Isolator	SKYFR-000855	PCB-00049

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