

SPECIFICATION SHEET

SKYFR-001595: 791—821 MHz Single Junction Robust Lead Isolator

Applications

- Wireless infrastructure
- Power amplifiers


Features

- Operating frequency range: 791 to 821 MHz
- BeO free
- RoHS compliant

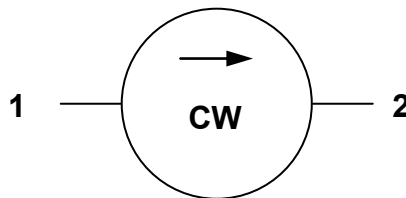


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Input power	P			150	W
Peak power	P _{PK}			1000	W
Reverse power	P	With baseplate of 210°C for 10 minutes		60	W
Operating temperature range	T _{OP}		-40	+120	°C
Storage temperature range	T _{STOR}		-55	+130	°C

Note: The power rating and reliability of the device will not degrade with an operating temperature of up to +120°C. Exceeding any of the other 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		791		821	MHz
Impedance				50		Ω
Input impedance, real		0°C – 120°C, 791MHz—806MHz	44		56.5	Ω
Input impedance, real		0°C – 120°C, 806MHz—821MHz	44		53.5	Ω
Input impedance, imaginary		0°C – 120°C	-j5		+j6.5	Ω
Input impedance, real		-40°C – 0°C	43		57.5	Ω
Input impedance, imaginary		-40°C – 0°C	-j6		+j6.5	Ω
Insertion loss	IL				0.25	dB
Isolation	ISO	0°C – 120°C	24	26		dB
Isolation	ISO	-40°C – 0°C	23			dB
Isolation	ISO	731MHz—881 MHz	10			dB
Return loss, input	RL	0°C – 120°C	23			dB
Return loss, input	RL	-40°C – 0°C	22			dB
Return loss, output	RL		22			dB
Intermodulation distortion (Note 2)	IMD	2 x 65W CW tones, 1MHz spacing	68			dBc
Group Delay					2.0	ns
Group Delay variation					0.5	ns
Group Delay variation		731MHz—881 MHz			2.0	ns
Resonance frequency			891		701	MHz
Harmonics, 2nd			15			dBc
Harmonics, 3rd			10			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 +130°C.

Note 4: The power rating and reliability of the device will not degrade with an operating temperature of +130°C.

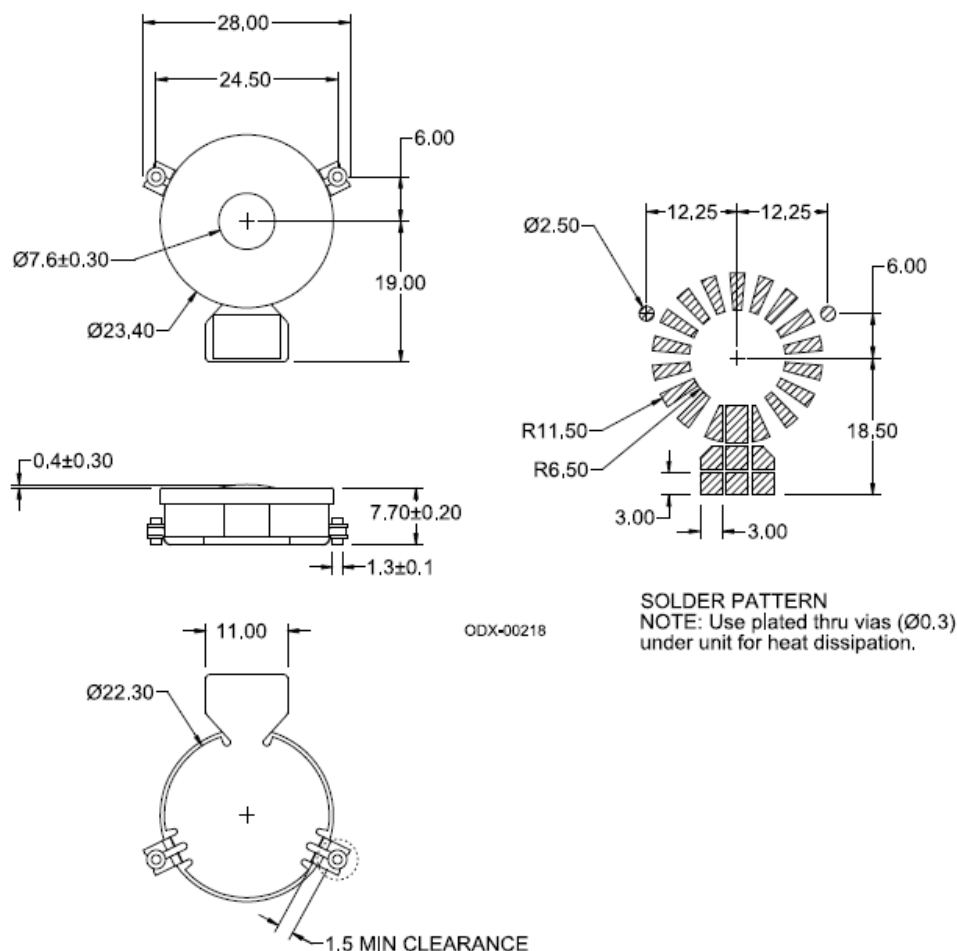
Table 3. Plating Specification

Section	Base Material	Plating
Pins	Brass	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-001595	PCB-00188

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All dimensions in millimeters.

Tolerance: $\pm 0.2\text{mm}$ unless otherwise specified.

Model number, lot code and port designation printed on top side of device.

Figure 2. Package Dimensions

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