

SKYFR-001509: 2110—2170 MHz Single Junction Robust Lead Isolator

Applications

- Wireless infrastructure
- Power amplifiers



Features

- Operating frequency range: 2110 to 2170 MHz
- BeO free
- RoHS compliant

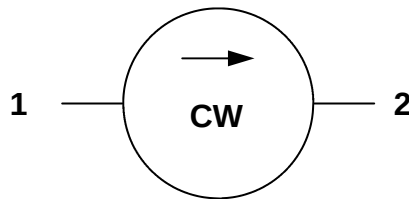


Figure 1. Block Diagram

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 +130°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		2110		2170	MHz
Impedance				50		Ω
Input impedance, real			46.5		53.5	Ω
Input impedance, imaginary			-j4.5		+j4.5	Ω
Insertion loss	IL				0.18	dB
Isolation	ISO		28			dB
Isolation	ISO	1960MHz—2320MHz	14			dB
Return loss	RL	Port 1 and 2	25			dB
Attenuation			29	30	31	dB
Intermodulation distortion (Note 2)	IMD	2 x 65W CW tones, 1MHz spacing	70			dBc
Group Delay					2.0	ns
Group Delay variation					0.5	ns
Group Delay variation		1960MHz—2320MHz			2.0	ns
Resonance frequency			2370		1910	MHz
Harmonics, 2nd			10			dB
Harmonics, 3rd			5			dB

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.

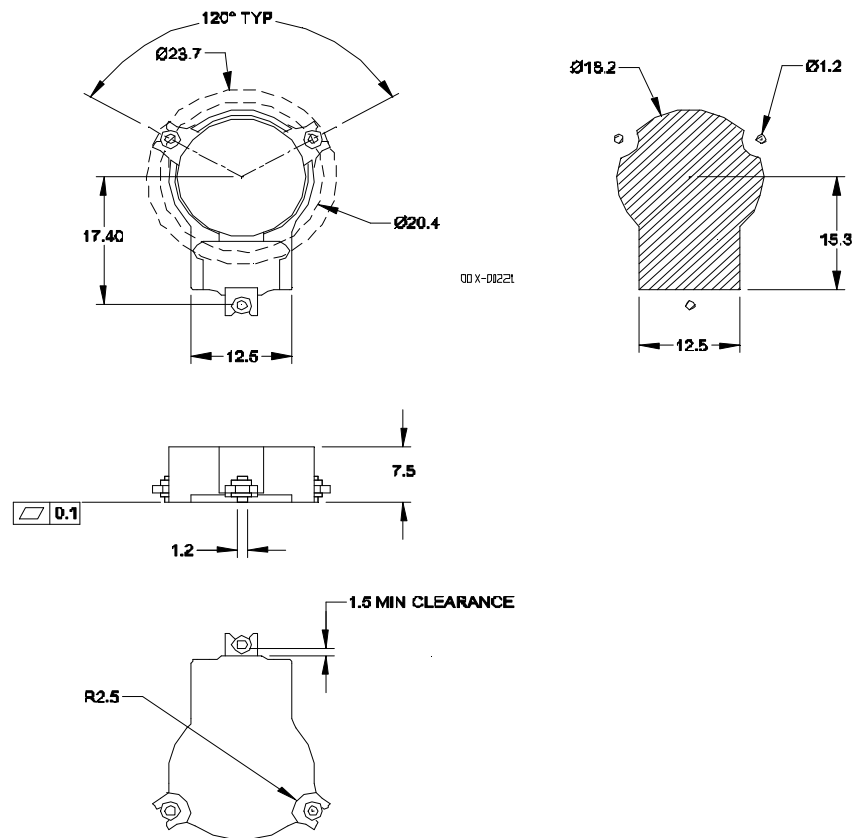
Table 3. Plating Specification

Section	Base Material	Plating
Pins	Brass	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-001509	PCB-00191

SPECIFICATION SHEET • SKYFR-001509



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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