

SKYFR-001290: 1930—1990 MHz Single Junction Robust Lead Isolator

Applications

- Wireless infrastructure
- Power amplifiers



Features

- Operating frequency range: 1930 to 1990 MHz
- BeO free
- RoHS compliant

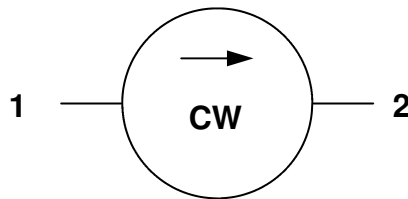


Figure 1. Block Diagram

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	The device will handle reverse power up to 60W		60	W
Operating temperature range	T _{OP}		-40	+95	°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 +115°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		1930		1990	MHz
Impedance				50		Ω
Input impedance, real			46.5		53.5	Ω
Input impedance, imaginary			-j4.5		+j4.5	Ω
Insertion loss	IL				0.15	dB
Isolation	ISO		26			dB
Isolation	ISO	1776MHz—2144MHz	16			dB
Return loss, input	RL		25			dB
Return loss, output	RL		23			dB
Intermodulation distortion (Note 2)	IMD	2 x 65W CW tones, 5MHz spacing	70			dBc
Group Delay		1776MHz—2144MHz			2.0	ns
Group Delay variation		1930MHz—1990MHz			0.5	ns
Group Delay variation		1776MHz—2144MHz			2.0	ns
Resonance frequency			2180		1730	MHz

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 +115°C.

Note 4: The power rating and reliability of the device will not degrade with an operating temperature of +115°C.

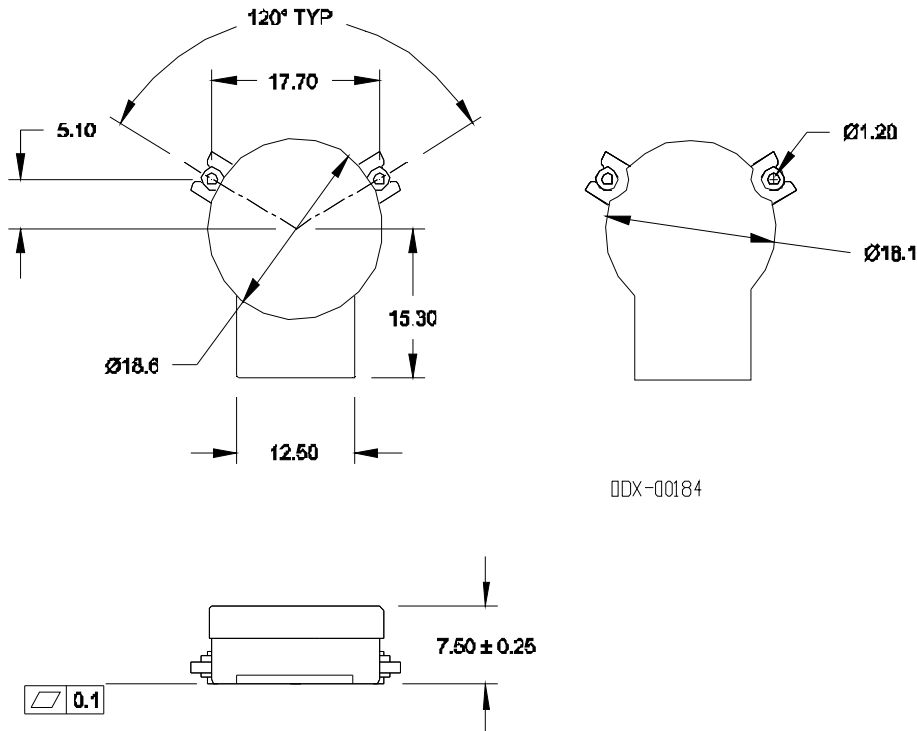
Table 3. Plating Specification

Section	Base Material	Plating
Pins	Brass	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-001290	PCB-00134

SPECIFICATION SHEET • SKYFR-001290



DDX-00184

All dimensions in millimeters.
 Tolerance: $\pm 0.2\text{mm}$ unless otherwise specified.
 Model number, lot code and part designation printed on top side of device.

Figure 2. Package Dimensions

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