

SKYFR-001398: 758—803 MHz Single Junction Robust Lead Isolator

Applications

- Wireless infrastructure
- Power amplifiers



Features

- Operating frequency range: 758 to 803 MHz
- BeO free
- RoHS compliant

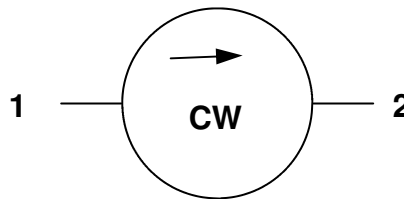


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Input power	P		70	100	W
Peak power	P _{PK}		200	500	W
Reverse power	P	The device will handle reverse power up to 60W	60		W
Operating temperature range	T _{OP}		-40	+120	°C
Storage temperature range	T _{STOR}		-40	+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		758		803	MHz
Impedance				50		Ω
Input impedance			46.5	50	53.5	Ω
Input impedance			-4.5j		+4.5j	j Ω
Insertion loss	IL				0.27	dB
Isolation	ISO		26			dB
Isolation	ISO	645MHz—916MHz	12			dB
Return loss	RL	Port 1	24			dB
Return loss	RL	Port 2	24			dB
Intermodulation distortion (Note 2)	IMD	2 x 20W CW tones, 5MHz spacing	60			dBc
Group delay					2	ns

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 +130°C.

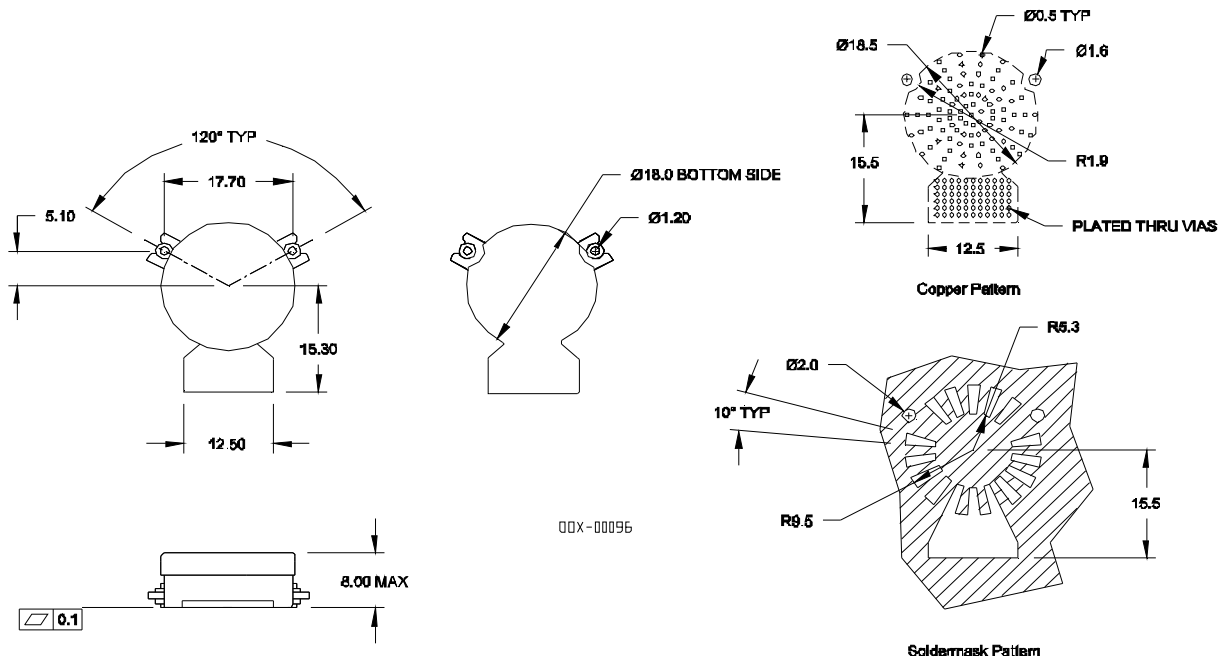
Table 3. Plating Specification

Section	Base Material	Plating
Lead	Bronze	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-001398	MAFX-999999-000PPR

SPECIFICATION SHEET • SKYFR-001398



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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