

SPECIFICATION SHEET

SKYFR-000965: 1805—1880 MHz Single Junction Robust Lead Isolator

Applications

- Wireless infrastructure
- Power amplifiers



Features

- Operating frequency range: 1805 to 1880 MHz
- BeO free
- RoHS compliant

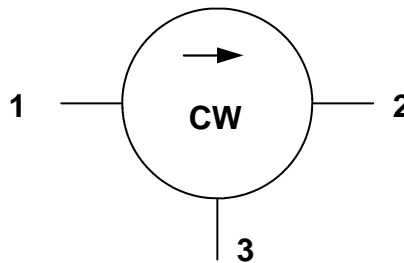
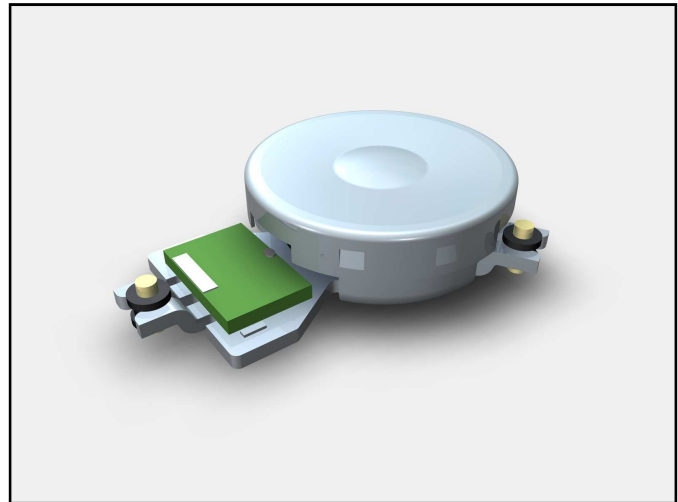


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Input power	P		70	140	W
Peak power	P _{PK}		200	500	W
Reverse power	P	The device will handle reverse power up to 70W	70	70	W
Operating temperature range	T _{OP}		-40	+90	°C
Storage temperature range	T _{STOR}		-40	+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		1805		1880	MHz
Impedance				50		Ω
Input impedance phase angle			-90		+90	degrees
Insertion loss	IL			0.2	0.25	dB
Isolation	ISO	1805MHz—1880MHz	25	28		dB
Isolation	ISO	1765MHz—1920MHz	18			dB
Out of band attenuation		@2nd harmonic	15			dB
Return loss	RL		21			dB
Intermodulation distortion (Note 2)	IMD	2 x 25W CW tones, 1MHz spacing	68	70		dBc
Group delay		1765MHz—1920MHz			2.0	ns
Group delay variation					0.5	ns
Attenuation			29		31	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% when the operating temperature increases from +90°C to +100°C.

Note 4: Performance will not degrade by >30% when the operating temperature increases from +100°C to +130°C.

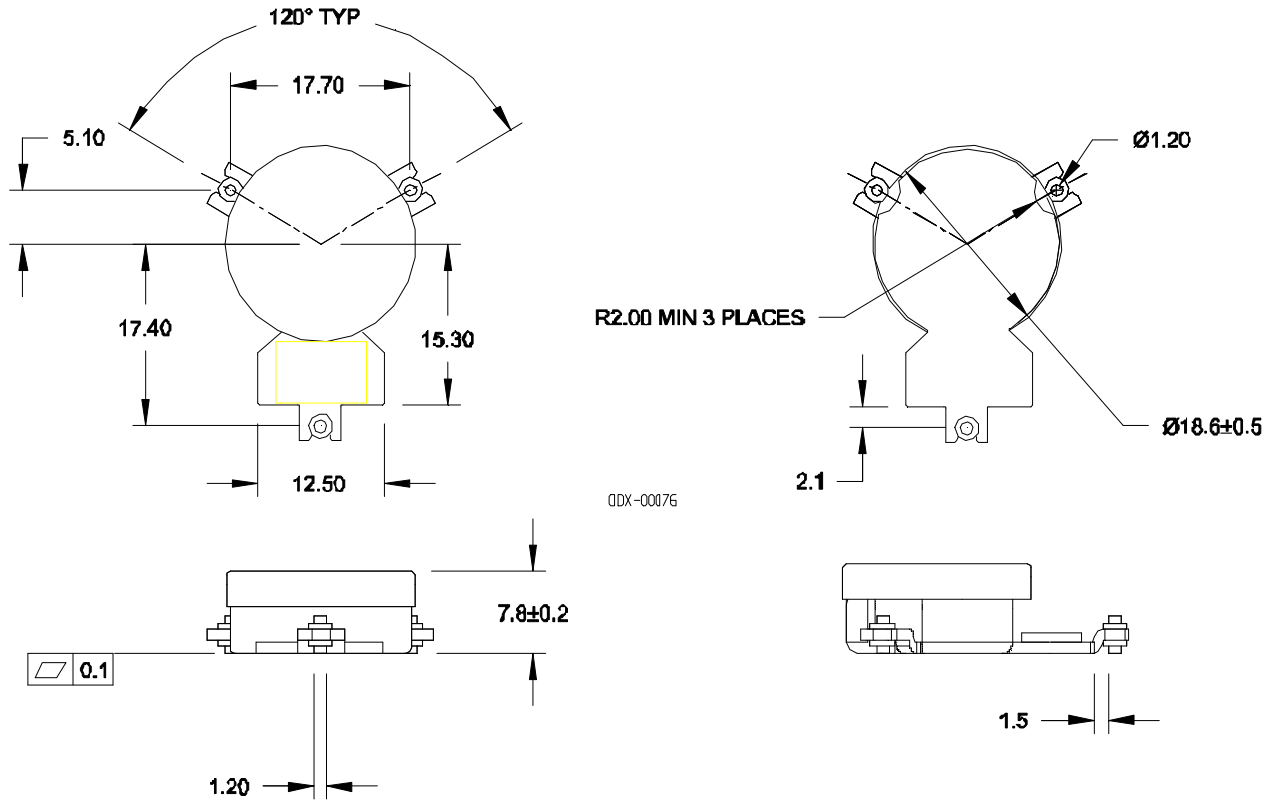
Table 3. Plating Specification

Section	Base Material	Plating
Lead	Bronze	Gold
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Evaluation Board Part Number
SKYFR-000965	TFX-00062

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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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