

SKYFR-001876: 2350—2360 MHz Single Junction Isolator

Applications

- Wireless infrastructure
- Power amplifiers

Features

- Operating frequency range: 2350MHz to 2360MHz
- BeO free
- RoHS compliant



Skyworks Green™ products are compliant with all applicable legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green™*, document number SQ04-0074.

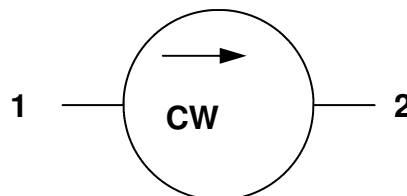
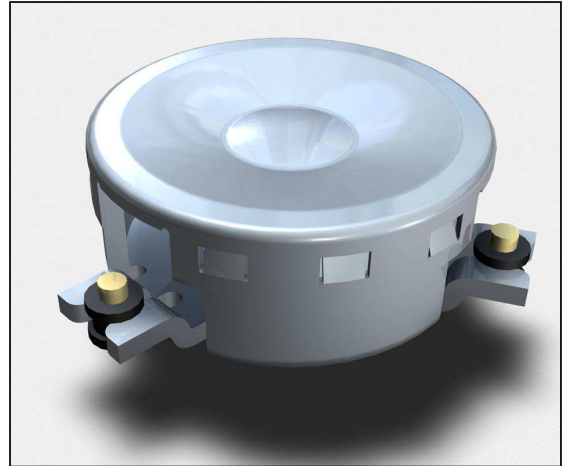


Figure 1. Block Diagram

Table 1. Absolute Maximum Ratings

Parameter	Symbol	Test Condition	Min	Max	Units
Average power, forward	P _{AVG}			100	W
Peak power, forward	P _{PK}			1000	W
Average power, reverse	P _{REV}	No time limit		40	W
Operating temperature range	T _{OP}		-40	+115	°C
Storage temperature range	T _{STOR}		-40	+125	°C

Note: Exceeding any of the limits listed here may result in permanent damage to the device or may reduce device reliability.

SPECIFICATION SHEET • SKYFR-001876

Table 2. Electrical Specifications (Note 1)

Parameter	Symbol	Test Condition	Min	Typical	Max	Units
Frequency range	f		2350		2360	MHz
Impedance				50		Ω
Insertion loss	IL	P1 to P2			0.20	dB
Isolation	ISO	P2 to P1, 2350MHz to 2360MHz	22			dB
Isolation	ISO	P2 to P1, 2330MHz to 2380MHz	20			dB
Isolation	ISO	P2 to P1, 2320MHz to 2390MHz	6			dB
Return loss	RL	P1 and P2, 2350MHz to 2360MHz, 0°C to +115°C	23			dB
Return loss	RL	P1 and P2, 2350MHz to 2360MHz, -40°C to +0°C	20			dB
Return loss	RL	P1 and P2, 2330MHz to 2380MHz	20			dB
Return loss	RL	P1 and P2, 2320MHz to 2390MHz	6			dB
Intermodulation distortion, 3rd order	IMD3	2 x 50W CW tones, 5MHz spacing			-69	dBc
Intermodulation distortion, 5th order	IMD5	2 x 50W CW tones, 5MHz spacing			-79	dBc
Harmonics		2 x f_0 , 100W CW			0	dBm
Harmonics		3-4 x f_0 , 100W CW			-10	dBm
Harmonics		5 x f_0 , 100W CW			-35	dBm
Harmonics		6-7 x f_0 , 100W CW			-25	dBm
Out of band attenuation Port 1 to Port 2		2 x f_0	10			dB
Out of band attenuation Port 1 to Port 2		3 x f_0	5			dB
Out of band attenuation Port 1 to Port 2		n x f_0	5			dB
Group delay		2350MHz to 2360MHz	0.5		2.8	ns
Deviation over temperature range		With fixed frequency for 2350MHz to 2360MHz			± 0.05	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.

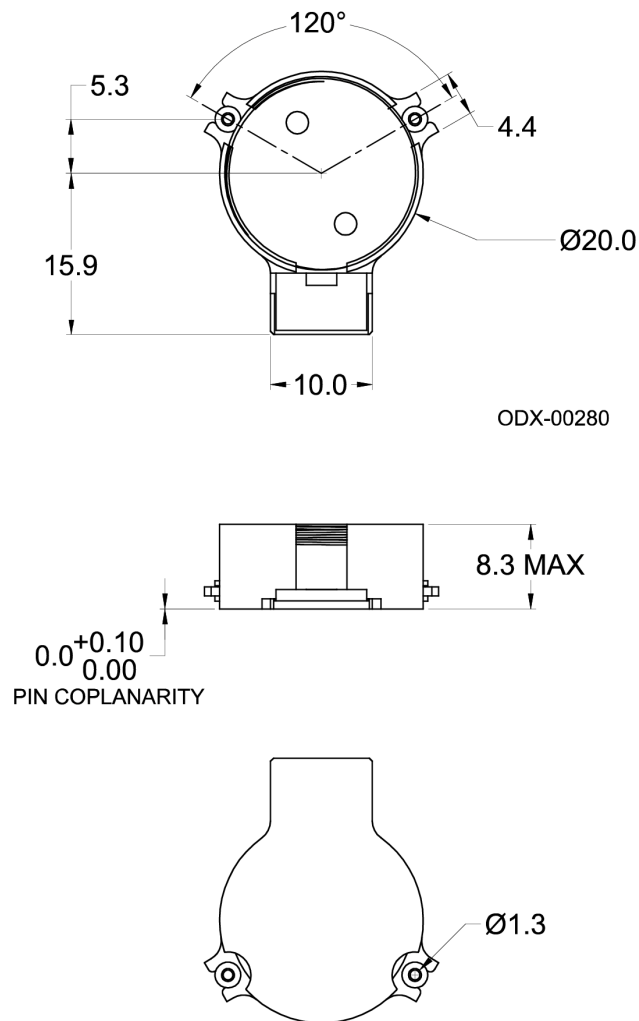
Note 3: Test fixture PCB is Rogers 4350B, 0.50mm thick, with track width of 0.95mm

Table 3. Plating Specification

Section	Base Material	Plating
Leads	Copper	Silver
Housing	Steel	Silver

Table 4. Ordering Information

Manufacturing Part Number	Ericsson Part Number
SKYFR-001876	UNH 102 3056/xx



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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