

1. Scope

This specification applies to DVRF00066, RF Isolator.
 Document revision: B

2. Product Description and Identification (Part Number)

- 1) Description: Isolator
- 2) Product Identification (Part Number): DVRF00066
- 3) Direction: Clockwise, see Fig 2-1.

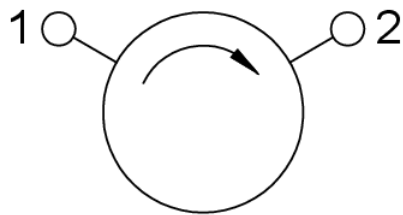


Fig. 2-1

3. Electrical Characteristics

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency range		2110		2200	MHz
Operating temperature range		-40		+115	°C
Storage temperature range		-55		+155	°C
Average Power				100	W
Peak Power				1000	W
Reverse Power				40	W
Impedance			50		Ω
Insertion Loss				0.20	dB
Isolation	2110MHz to 2200MHz	22			dB
Isolation	2080MHz to 2230MHz	20			dB
Isolation	2050MHz to 2260MHz	10			dB
Isolation	1990MHz to 2320MHz	8			dB

Isolation	1930MHz to 2380MHz	6			dB
Return Loss	0°C to +115°C	23			dB
Return Loss	-40°C to 0°C	20			dB
Return Loss	2080MHz to 2230MHz	20			dB
Return Loss	1930MHz to 2380MHz	6			dB
Intermodulation Distortion (IMD3)	2 x 40W CW tones, 1 MHz spacing			-69	dBc
Intermodulation Distortion (IMD5)	2 x 40W CW tones, 1 MHz spacing			-79	dBc
Group Delay		0.5		2.8	ns
Group Delay Variation	Over temperature range			±0.05	ns
Harmonics	2 x f, 80W CW			0	dBm
Harmonics	3 x f and 4 x f, 80W CW			-10	dBm
Harmonics	5 x f, 80W CW			-35	dBm
Harmonics	6 x f and 7 x f, 80W CW			-25	dBm
Out of band attenuation, 2nd	2 x f	10			dB
Out of band attenuation, other	3 x f and n x f	5			dB

- a) Electrical Characteristics apply over the operating temperature range unless otherwise specified.
- b) Exceeding any of the other limits listed here may result in permanent damage to the device or may reduce device reliability.
- c) Test fixture PCB is Rogers 4350B, 0.50 thick.

4. Shape and Dimensions

- 1) Dimensions see Fig 4-1.
- 2) All dimensions are in mm.
- 3) Tolerance is $\pm 0.20\text{mm}$ unless otherwise indicated.
- 4) Coplanarity specification: 0.10mm maximum.
- 5) Pins and housing are silver (Ag) plated.
- 6) This device is RoHS compliant.

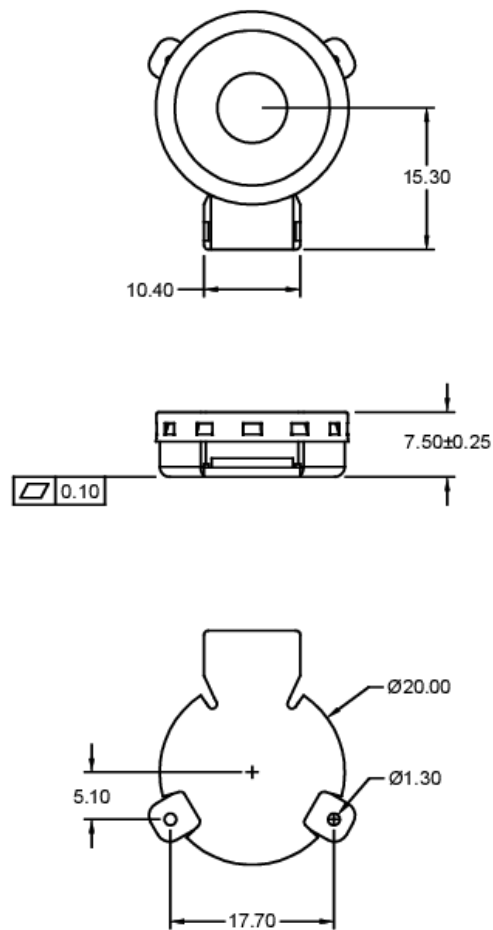


Fig. 4-1

5. Packaging

- 1) Devices are packed in Tape & Reel as per EIA481.
- 2) Reel: Standard 13" reel.
- 3) Quantity per reel: 200 devices.

6. Recommended Soldering Technologies

6.1 Re-flowing Profile

- △ Preheat condition: 150 ~200°C/60~120sec.
- △ Allowed time above 217°C: 60~90sec.
- △ Max temp: 260°C
- △ Max time at max temp: 10sec.
- △ Solder paste: Sn/3.0Ag/0.5Cu
- △ Allowed Reflow time: 2x max

[Note: The reflow profile in the above table is only for qualification and is not meant to specify board assembly profiles. Actual board assembly profiles must be based on the customer's specific board design, solder paste and process, and should not exceed the parameters as the Reflow profile shows.]

