

1. Scope

This specification applies to DVRF00065, RF Isolator.
Document revision: A

2. Product Description and Identification (Part Number)

- 1) Description: Isolator
- 2) Product Identification (Part Number): DVRF00065
- 3) Direction: Clockwise, see Fig 2-1.

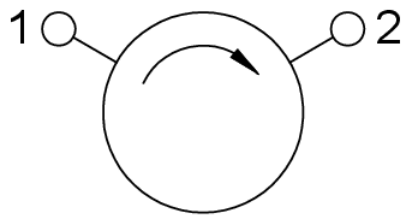


Fig. 2-1

3. Electrical Characteristics

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency range		758		803	MHz
Operating temperature range		-40		+125	°C
Storage temperature range		-55		+155	°C
Average Power				100	W
Peak Power				1300	W
Reverse Power				80	W
Impedance			50		Ω
Insertion Loss				0.25	dB
Isolation	758MHz to 803MHz	22			dB
Isolation	738MHz to 823MHz	20			dB
Isolation	708MHz to 853MHz	10			dB
Isolation	658MHz to 903MHz	8			dB

Isolation	608MHz to 953MHz	6			dB
Return Loss	0°C to +125°C	23			dB
Return Loss	-40°C to 0°C	22			dB
Return Loss	738MHz to 823MHz	17			dB
Return Loss	708MHz to 853MHz	10			dB
Return Loss	658MHz to 903MHz	6			dB
Return Loss	608MHz to 953MHz	3			dB
Intermodulation Distortion (IMD3)	2 x 50W CW tones, 1 MHz spacing			-63	dBc
Intermodulation Distortion (IMD5)	2 x 50W 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, 100W CW			0	dBm
Harmonics	3 x f and 4 x f, 100W CW			-10	dBm
Harmonics	5 x f, 100W CW			-35	dBm
Harmonics	6 x f and 7 x f, 100W CW			-25	dBm
Out of band attenuation, 2nd	2 x f	10			dB
Out of band attenuation. other	2 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 ± 0.20 mm unless otherwise indicated.
- 4) Coplanarity specification: 0.10mm maximum.
- 5) Pins and housing are silver (Ag) plated.
- 6) This device is RoHS compliant.

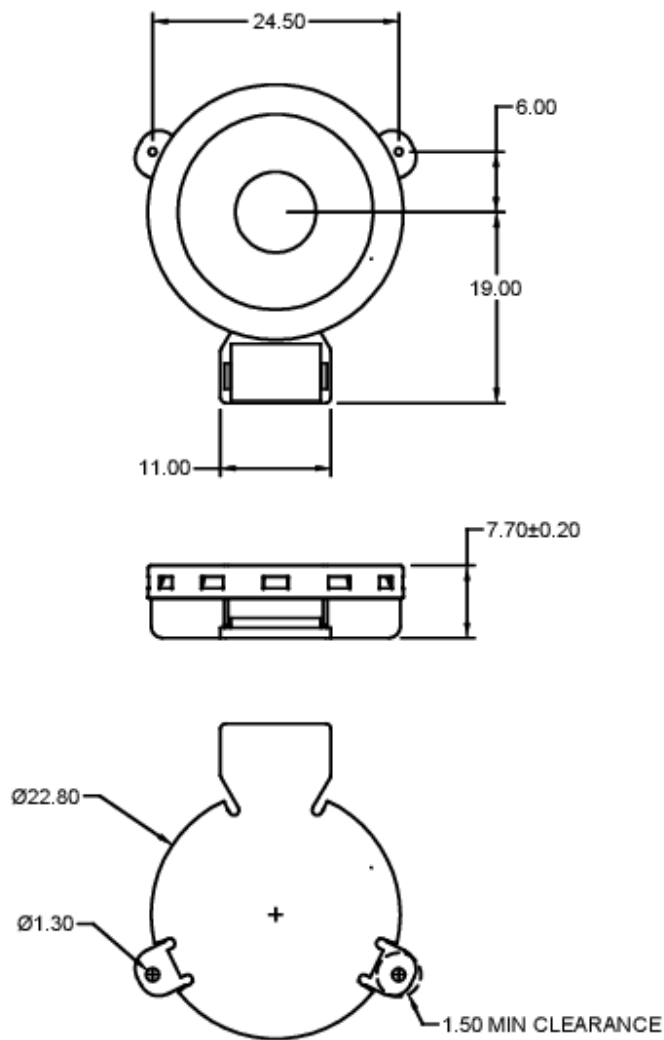


Fig. 4-1

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.]

