

Features

- Low Cost
- Compact Size
- Gold Plated Solder Pins
- Rugged Die cast Construction
- RoHS* Compliant

Description and Applications

M/A-COM's MACS-007800-0M1R00 is a RoHS Compliant K-Band Local Oscillator consisting of a Gunn Diode oscillator assembled into a die cast waveguide package.

These Local Oscillators are well suited for high volume applications where small size and reliability are required. This local oscillator is an inexpensive low power transmitter suitable for use in CW Doppler radar systems. Typical applications include, Speed radars, traffic control, and industrial process control.

Product Specifications

| Parameter | Test Conditions | Units | Min. | Typ. | Max. |
|---------------------|-----------------|-------|-------|--------|-------|
| Operating Frequency | +25 °C | GHz | 24.12 | 24.150 | 24.17 |
| Output Power | +25 °C | mW | 8.0 | | |
| Operating Current | +25 °C | mA | | 175 | 250 |
| Operating Voltage | +25 °C | VDC | | 5.0 | |

Operating temperature to full specifications -30°C to +70°C

Absolute Maximum Ratings ¹

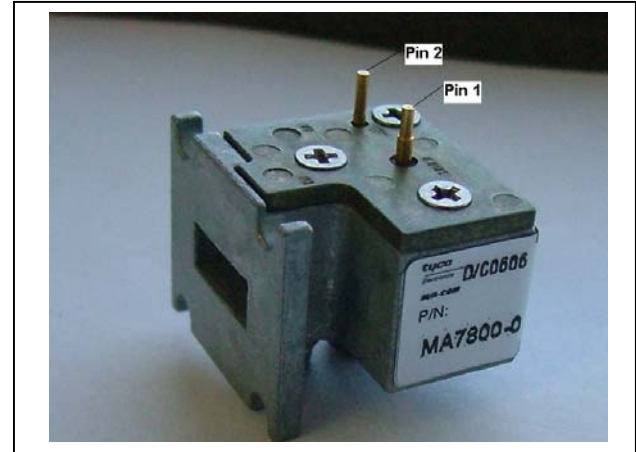
| Parameter | Maximum Ratings |
|-------------------------|-------------------|
| Operating Temperature | -40 °C to +85 °C |
| Storage Temperature | -65 °C to +150 °C |
| Incident RF Input Power | +20 dBm |
| DC Input (Gunn Diode) | +5.5VDC |
| Soldering Temperature | +260 °C max. |

1. Exceeding these limits may cause permanent damage.

**Note: Device is ESD Sensitive.
Proper ESD Precautions should be
used when handing this Device..**

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

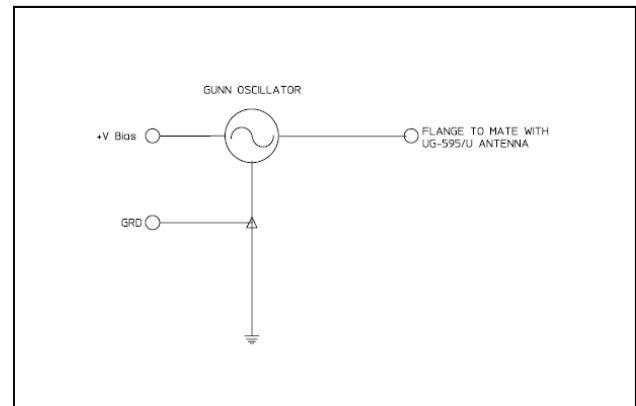
Package Outline



PIN Configuration

| Pin | Function |
|-----|----------|
| 1 | DC Input |
| 2 | GND |

Functional Block Diagram



MACS-007800-0M1R00

Local Oscillator
24.125 GHz

Rev. V3

