

## 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 <sup>1</sup>

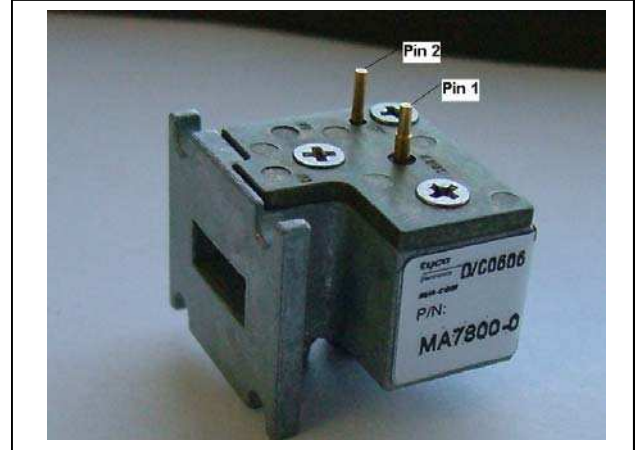
Parameter	Maximum Ratings
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-65 °C to +150 °C
Incident RF Input Power	+20 dBm
DC Input (Gunn Diode)	+5.5VDC
Soldering Temperature	+260 °C max.

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.

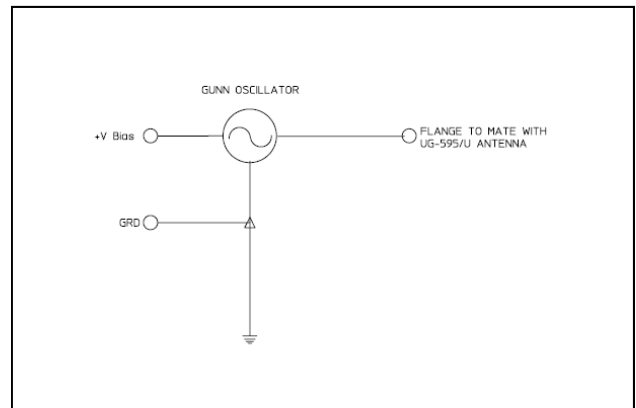
## Package Outline



## PIN Configuration

Pin	Function
1	DC Input
2	GND

## Functional Block Diagram



# MACS-007800-0M1R00

## Local Oscillator 24.125 GHz

Rev. V3

