

## Features

- Low Cost
- 8.0mW Output Power
- Gold Plated Solder Pins
- Rugged Die cast Construction
- 10Hz to 5000Hz IF Bandwidth
- Lead Free (RoHS Compliant)
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## Description and Applications

M/A-COM's MACS-007801-0M1R10 is a RoHS Compliant K-Band Mono Transceiver consisting of a Gunn Diode oscillator and Schottky Diode assembled into a die cast waveguide package.

These Mono Transceivers are well suited for high volume applications where small size and reliability are required. Typical applications include police radar and presence sensing applications.

## Product Specifications

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Operating Frequency	+25 °C	GHz	24.100	24.125	24.150
Output Power	+25 °C	mW	8.0		
Operating Current	+25 °C	mA	140	175	200
Operating Voltage	+25 °C	VDC		5.0	
Schottky Diode Noise	+25 °C	micro-Volts		2.5	5.0
Transceiver Sensitivity	+25 °C	-dBc	-93	-103	

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

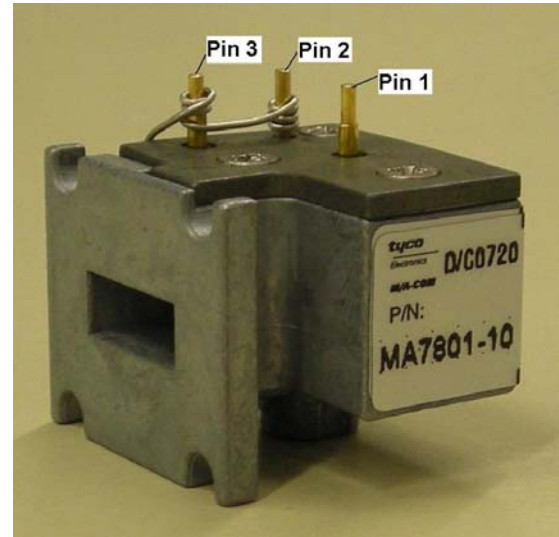
## Absolute Maximum Ratings<sup>1</sup>

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 handling this Device..**

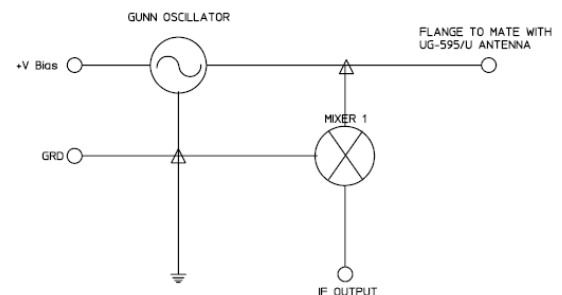
## Package Outline



## PIN Configuration

PIN	Function
1	DC Input
2	GND
3	IF Output

## Functional Block Diagram



**ADVANCED:** Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.  
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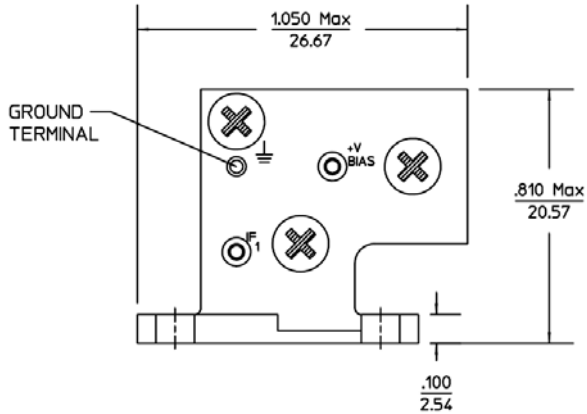
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# MACS-007801-0M1R10

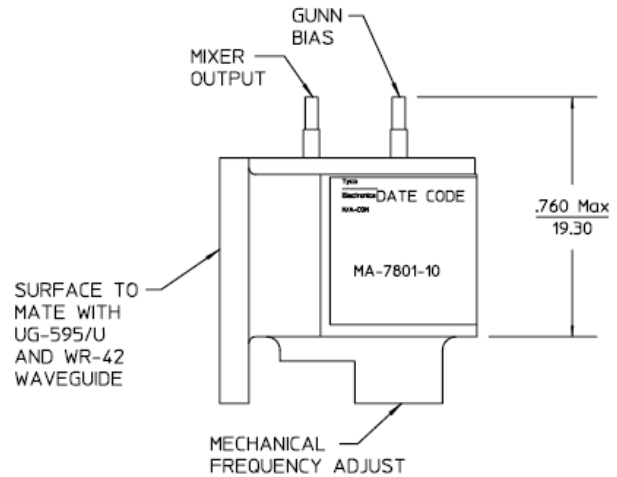
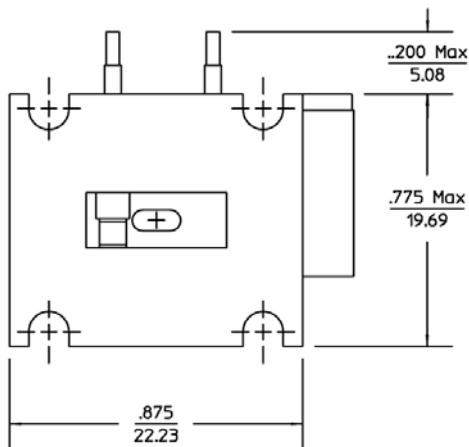
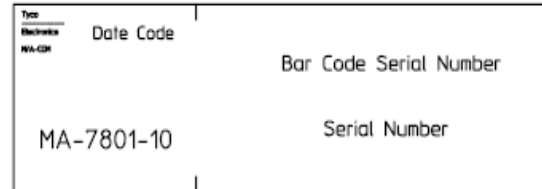


Mono Doppler Transceiver  
24.125 GHz

Rev. V1



## Label Information



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