

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°

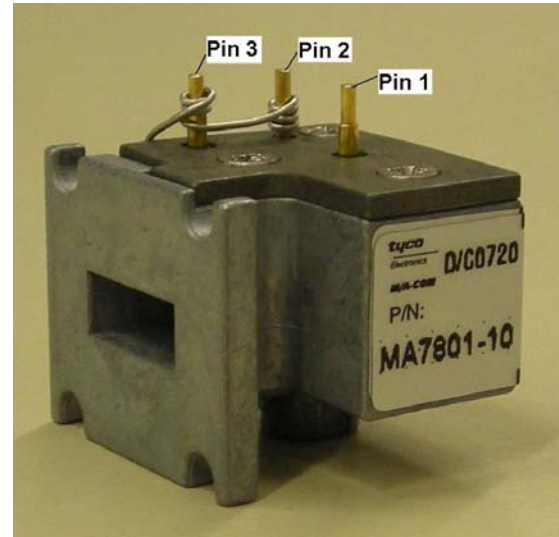
Absolute Maximum Ratings¹

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..

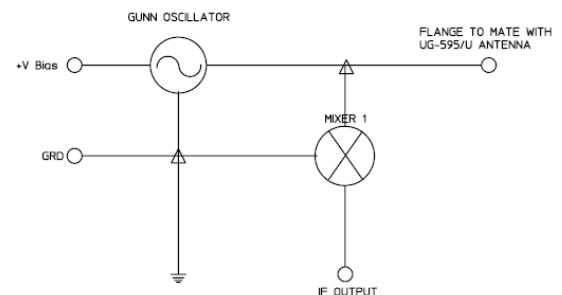
Package Outline



PIN Configuration

PIN	Function
1	DC Input
2	GND
3	IF Output

Functional Block Diagram



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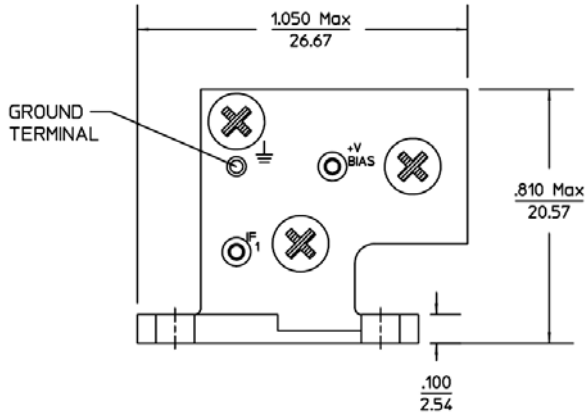
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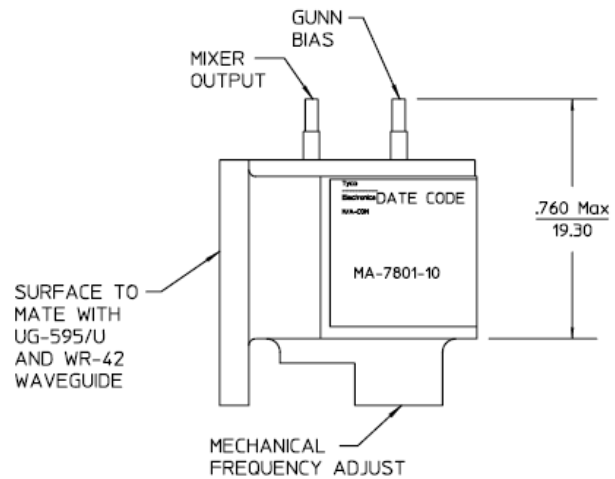
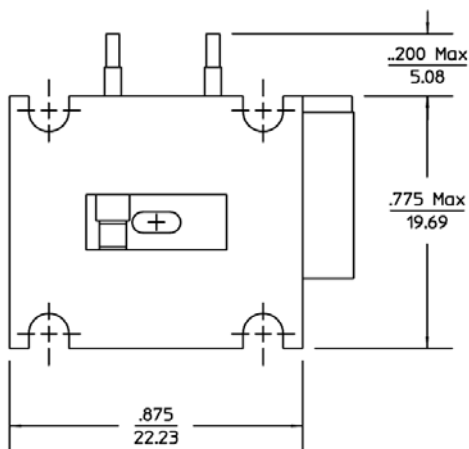
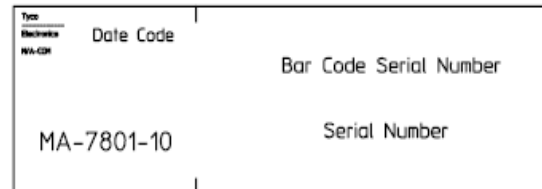


Mono Doppler Transceiver
24.125 GHz

Rev. V1



Label Information



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