### MACS-007801-0M1R10



#### Mono Doppler Transceiver 24.125 GHz

Rev. V1

#### **Features**

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

#### **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 Con- ditions	Units	Min.	Тур.	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..

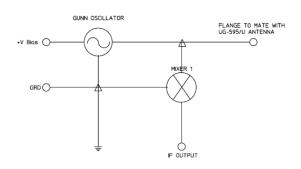
#### **Package Outline**



#### **PIN Configuration**

PIN	Function
1	DC Input
2	GND
3	IF Output

#### **Functional Block Diagram**





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Visit www.macomtech.com for additional data sheets and product information.

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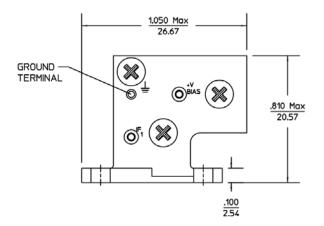
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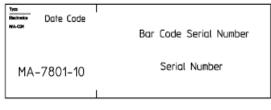


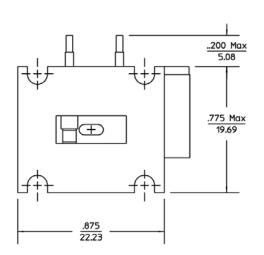
Mono Doppler Transceiver 24.125 GHz

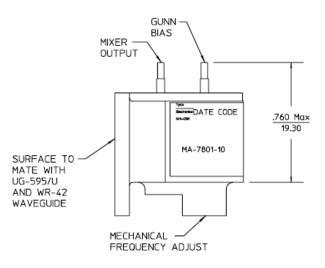
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