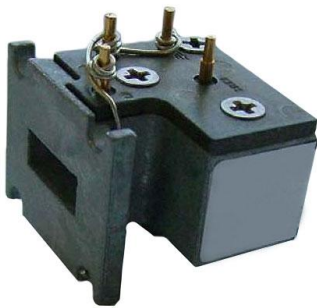


MACS-007802-0M1R1B Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	MACS-007802-0M1R1B-DG
Manufacturer	MACOM Technology Solutions
Manufacturer Product Number	MACS-007802-0M1R1B
Description	RF TXRX MODULE 24GHZ CHAS MNT
Detailed Description	Transceiver Module 24.1GHz ~ 24.15GHz Antenna Not Included Chassis Mount

This model MACS-007802-0M1R1B is available at DiGi Electronics.

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RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

MACS-007802-0M1R1B

Series:

-

DiGi-Electronics Programmable:

Not Verified

Protocol:

-

Frequency:

24.1GHz ~ 24.15GHz

Power - Output:

-

Serial Interfaces:

-

Utilized IC / Part:

-

Voltage - Supply:

5V

Current - Transmitting:

-

Operating Temperature:

-40°C ~ 85°C

Base Product Number:

MACS-007802

Manufacturer:

MACOM Technology Solutions

Product Status:

Active

RF Family/Standard:

-

Modulation:

-

Data Rate:

-

Sensitivity:

-

Antenna Type:

Antenna Not Included

Memory Size:

-

Current - Receiving:

-

Mounting Type:

Chassis Mount

Package / Case:

Module

Environmental & Export classification

Moisture Sensitivity Level (MSL):

1 (Unlimited)

HTSUS:

8543.70.9860

ECCN:

EAR99

MACS-007802-0M1R10



Stereo Doppler Transceiver 24.125 GHz

Rev. V1

Features

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

Description and Applications

M/A-COM's MACS-007802-0M1R10 is a RoHS Compliant K-Band Stereo Doppler transceiver consisting of a Gunn Diode oscillator and two Schottky Diode mixers assembled into a die cast waveguide package. These Transceivers are well suited for high volume applications where small size and reliability are required. Typical applications include automatic door openers, police radar and presence sensing applications, where Direction of motion is required.

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	
Mixer Phasing	+25 °C	Degrees	50		120

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

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..

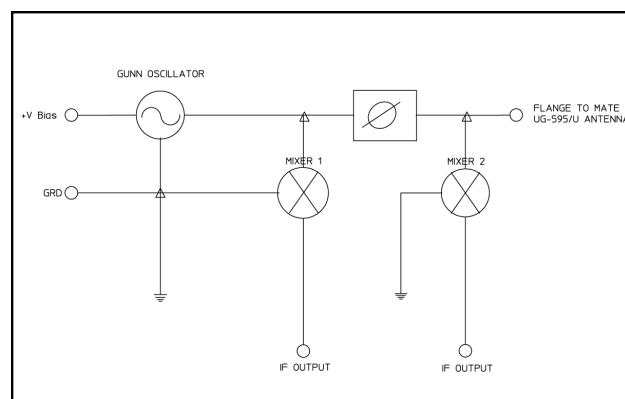
Package Outline



PIN Configuration

PIN	Function
1	DC Input
2	GND
3	IF Output (Mixer 1)
4	IF Output (Mixer 2)

Functional Block Diagram



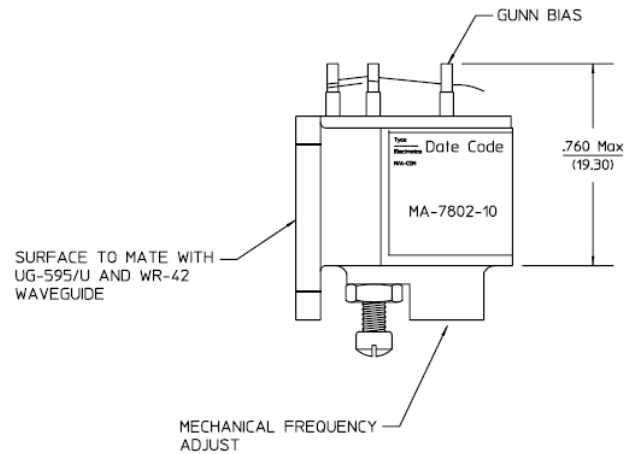
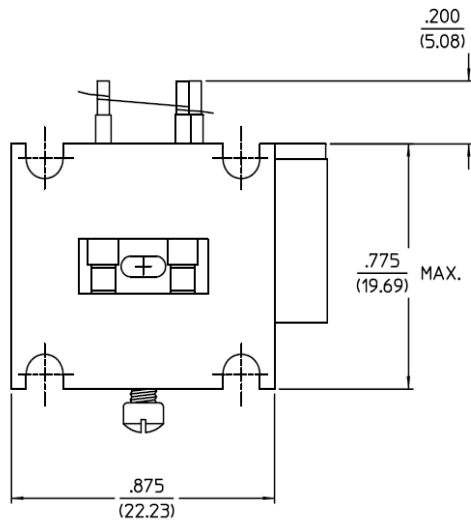
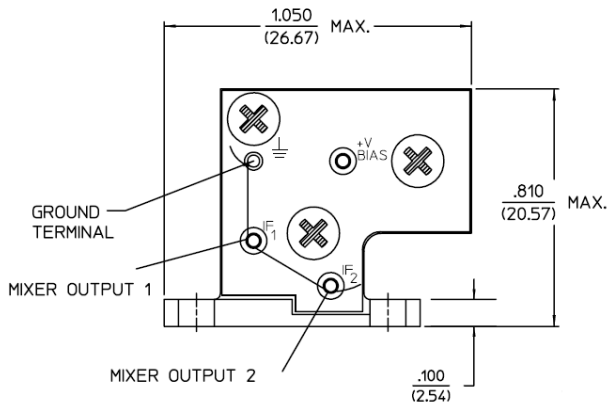
*Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

MACS-007802-0M1R10



Stereo Doppler Transceiver 24.125 GHz

Rev. V1



MACS-007802-0M1R10



Stereo Doppler Transceiver
24.125 GHz

Rev. V1

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