

M/A-COM, INC.
PROPRIETARY AND PRIVATE

The information contained in this document or item is the property of M/A-COM, Inc. and or its subsidiaries/affiliates (collectively "M/A-COM") and shall be kept in strict confidence except with written permission of M/A-COM. Such information or items shall not be published, disclosed to others, or used for manufacture or sale, or for any purpose; and this document or item shall not be reproduced in whole or in part. If permission is granted for reproduction, this legend shall be included in any such reproduction. This document or item shall be returned to M/A-COM upon request or completion of the use for which it was made available to recipient, or termination of relationship with recipient, whichever first occurs. Any recipient so agrees by acceptance of this document or item.

REVISIONS			
REV	DESCRIPTION	DATE	APPV'D
-	Initial Release ECO 20059815		See Below
A	Per ECO 20061452 added the word diode statement added the word to to the Mixer Specification	10/6/06	T. Woodward



1011 Pawtucket Blvd.,
 Lowell, MA 01853-3295
 Cage Code 96341

ATTENTION

USER OF THIS DOCUMENT
 IS RESPONSIBLE FOR
 DETERMINING CURRENT
 REVISION LEVEL BEFORE
 USING DOCUMENT.

Revised By: G. Cardoso Date 9/7/06
 Documentation

Approved By: T. Woodward Date 9/11/06
 Engineering

Approved By: R. Moore Date 9/7/06
 Manufacturing

Approved By: M. Donoghue Date 9/11/06
 Quality Assurance

PRODUCTION

TITLE: PRODUCT SPECIFICATION	
DWG NO: PS-MACS-007802-0M1RL6	REV: A
SHEET 1 of 2	

The MACS-007802-0M1RL6 is a K-Band Doppler transceiver consisting of a Gunn Diode oscillator and two Schottky barrier mixer Diodes assembled into a diecast waveguide package, designed for commercial applications where directional motion sensing is desired.

ELECTRICAL SPECIFICATIONS

Center Frequency:	24.125 GHz ± 25 MHz
Output Power :	4.5 mW min. @ 25°C 5.0mW Typical
Operating Voltage:	+5.0 Vdc
Operating Current:	60mA min., 100mA max, at +25°C
Transceiver Sensitivity: (Note 1)	-90dBc minimum 10Hz to 1000Hz
Transceiver Noise: (Note 1)	5.0 Micro Volts maximum 10Hz to 1000Hz
Mixer Phasing (Phase difference of I.F. output signals)	50° to 120° (non-adjustable)
Mixer Load Resistor: (DC Return) (Not supplied)	1000 ohms recommended
Frequency Drift vs. Temperature Change:	1MHz/deg.C maximum
Operating Temperature Range:	-30°C to +70°C, ambient

MECHANICAL SPECIFICATIONS

D.C. Bias (Gunn):	Solder Pin
Mixer Output	Solder Pin
R.F. Output	WR-42 waveguide mates with UR-595/U flange
RoHS Status:	Compliant

NOTES

1. When tested on designated M/A-COM Test Stand. Received signal is derived from a calibrated stimulus on the test stand.
2. Part is a direct replacement of M/A-COM Part Number MA86843-L06. This replacement is for RoHS compliancy and the form, fit and function of the end product has not changed. The conversion coatings were changed to meet RoHS standards. A new part number has been assigned to this product to track RoHS compliancy. Due to the length of the new part number a modified or reduced number will be put on the label. See Outline Drawing for modified part Number.

 	CAGE CODE: 96341	DWG. PS-MACS-007802-0M1RL6
	SHEET 2 OF 2	REV. A