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REVISIONS			
REV	DESCRIPTION	DATE	APPV'D
-	Initial release per ECO 20066763	See Below	



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Cage Code 96341

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PRODUCTION

TITLE: Product Specification,MACS-007802-0M1RRF	
DWG. NO: PS-MACS-007802-0M1RRF	REV. - SHEET 1 OF 2

The MACS-007802-0M1RRF is a RoHS Compliant K-Band Doppler Stereo Transceiver consisting of a Gunn Diode Oscillator and two Schottky barrier Diode mixers assembled into a diecast waveguide package, designed for commercial applications in directional motion sensing.

ELECTRICAL SPECIFICATIONS



Fo:	24.125 GHz \pm 25 MHz
Frequency Stability:	1 MHz/ $^{\circ}$ C maximum
Output Power:	5 mW typical @ 25 $^{\circ}$ C 4 mW minimum, 8 mW maximum
Operating Voltage:	+5.0 VDC
Operating Current:	110 mA maximum @ +25 $^{\circ}$ C
Transceiver Sensitivity:	-90 dBc, I.F. 10 Hz to 1 KHz
Mixer Phasing: (Phase difference of I.F. output signals)	50 $^{\circ}$ - 120 $^{\circ}$ (non-adjustable)
Mixer Load Resistor (supplied):	1000 ohms
Temperature Range:	-30 $^{\circ}$ C to +70 $^{\circ}$ C

MECHANICAL SPECIFICATIONS

Outline Drawing	MACS-007802-0M1RRF
D.C. Bias (Gunn):	Solder Pin
Mixer Output:	Solder Pin
R.F. Output:	WR-42 waveguide mates with UG 595/U flange

NOTES:

1. Maximum solder temperature to pins is 250 $^{\circ}$ C max for a 5 second duration.
2. Units are extremely ESD sensitive. Parts should only be handled in an appropriate ESD protected manner.
Failure to do so may void manufacturer warranty.
3. As measured at the output of a standard low noise amplifier with a voltage gain of 60 dB.
Amplifier bandwidth is 10 Hz to 1000 Hz.
4. Transceiver Meets Directive 2002/EC RoHS Compliant.
5. Each unit is supplied with a plate filter.

 	CAGE CODE: 96341	DWG. NO.: PS-MACS-007802-0M1RRF
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