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REVISIONS			
REV	DESCRIPTION	DATE	APPV'D
-	Initial Release per ECO		See Below
A	Per ECO 20061968 Change operating current to 100mA	10/25/06	T. Woodward



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Revised By: Gail Cardoso Date 9/1/06
 Documentation

Approved By: T. Woodward Date 9/6/06
 Engineering

Approved By: B. Moore Date 9/1/06
 Manufacturing

Approved By: M. Donoghue Date 9/1/06
 Quality Assurance

PRODUCTION

TITLE: PRODUCT SPECIFICATION	
DWG NO: PS-MACS-007802-0M1RSF	REV: A
SHEET 1 of 2	

The MACS-007802-0M1RSF 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 ± 25 MHz
Frequency Stability:	1 MHz/°C maximum
Output Power:	5.0 mW minimum @ 25°C
Operating Voltage:	+5.0 VDC
Operating Current:	100 mA maximum @ +25°C 110 mA maximum @ -30°C
Mixer Noise: (3)	5.0millivolts Maximum
Transceiver Sensitivity:	-93 dBc, I.F. 10 Hz to 1 KHz
Mixer Phasing: (Phase difference of I.F. output signals)	50° - 120° (non-adjustable)
Mixer Load Resistor (not supplied):	1000 ohms
Temperature Range:	-30°C to +70°C

MECHANICAL SPECIFICATIONS

Outline Drawing	Per OD-MACS-007802-0M1RS0
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°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.