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Cage Code 96341

REVISIONS

REV	DESCRIPTION	DATE	APPV'D
-	Initial release per ECO 20065751	See Below	

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PRODUCTION**TITLE:**

Product Specification,MACS-007802-0M1RSR

DWG. NO:

PS-MACS-007802-0M1RSR

REV. -

SHEET 1 OF 2

The MACS-007802-0M1RSR 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/°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 (supplied):	1000 ohms
Temperature Range:	-30°C to +70°C

MECHANICAL SPECIFICATIONS

Outline Drawing	Per MACS-007802-0M1RSR
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.
4. Transceiver Meets Directive 2002/EC RoHS Compliant.

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