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

tyco / Electronics

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ATTENTION

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

Revised By:	G. Cardoso Documentation	Date	9/7/06
Approved By:	T. Woodward Engineering	Date	9/11/06
Approved By:	R. Moore Manufacturing	Date	9/7/06
Approved By:	M. Donoghue Quality Assurance	Date	9/11/06

PRODUCTION

TITLE:
PRODUCT SPECIFICATION

DWG NO:
PS-MACS-007802-0M1RL6

REV: A

MATRIX

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.