



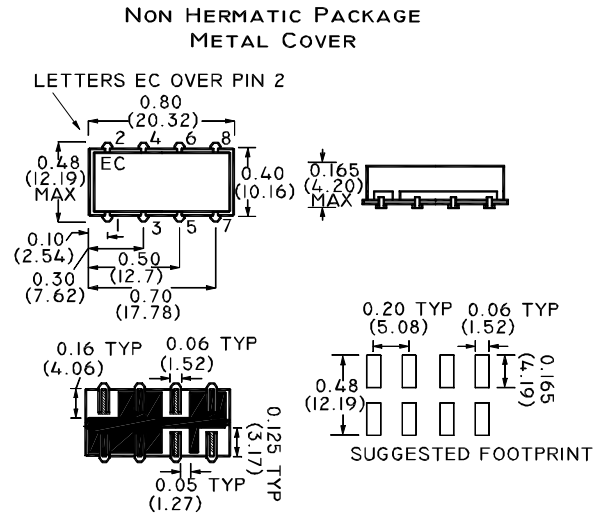
E-Series I/Q Demodulator 851-869 MHz

Features

- Excellent Phase and Amplitude Balance
- LO Power +10 dBm Typical
- Surface Mount



SM-92 Package



Description

M/A-COM's MAMDES0002 is a passive, surface mount I/Q Demodulator. Ideally suited for Direct Demodulation in PMR/TETRA applications.

Electrical Specifications @25°C

Parameter	Units	Typical	Minimum	Maximum
Frequency Range LO / RF 851-869 I/Q DC - 10	MHz MHz	— —	— —	— —
Amplitude Unbalance	dB	0.2	—	0.3
Phase Unbalance	Degrees	2.0	—	3.0
Isolation LO to RF LO to I/Q	dB dB	55 30	20 20	— —
Conversion Loss	dB	6.4	—	8.0
(LO) Carrier Power	dBm	+10 ± 1	—	—

Q= -90° for RF>LO

Absolute Maximum Ratings

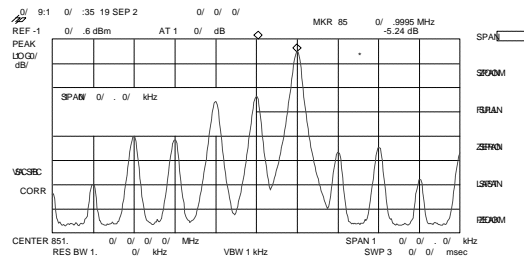
Parameter	Absolute Maximum
Operating Temperature	-10°C to +70°C
Storage Temperature	-55°C to +100°C
Impedance	50 Ohms Nominal
RF Power (1dB Compression)	4 dBm Max

Functional Configuration

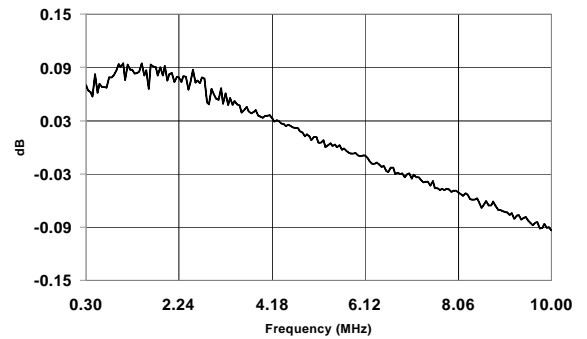
Function	Pin No.
LO	1
RF	8
I	5
Q	6
External 50 Ohms	—
Case Ground	2,3,4,7
Not Connected	—

Typical Performance @ +25°C

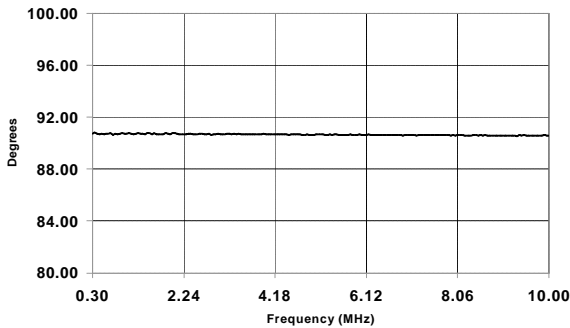
Conversion Loss



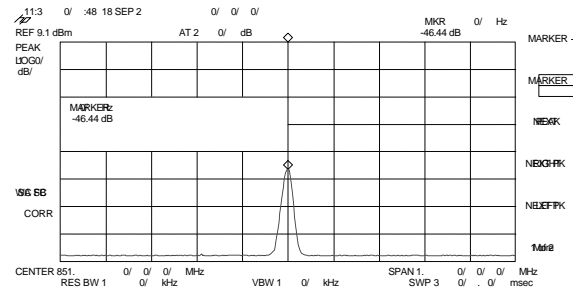
Amplitude Unbalance



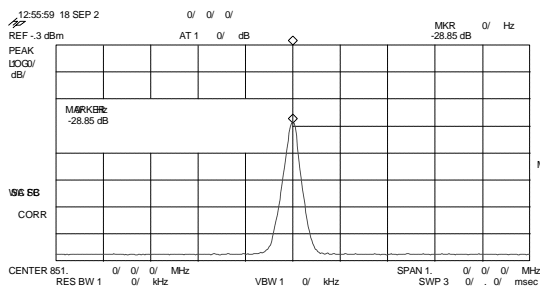
Phase Unbalance



L-R Isolation



L-I Isolation



L-Q Isolation

