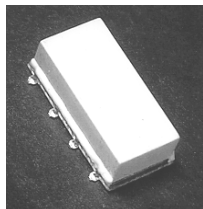




E-Series I/Q Modulator 851-869 MHz

Features

- High Carrier Suppression
- High 3I and 5I Suppression

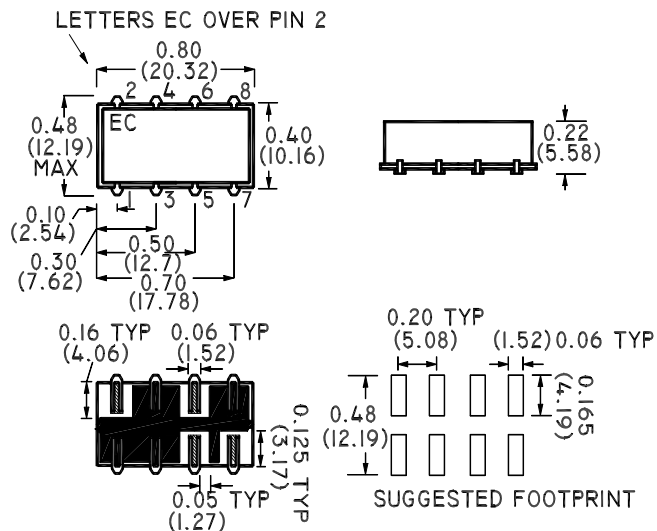


Description

M/A-COM's MAMDES0001 is a passive surface mount I/Q Modulator. Ideally suited for Direct Modulation in PMR/TETRA applications.

SM-82 Package

Note: Non Hermetic Package



Electrical Specifications @25°C

Parameter	Units	Typical	Minimum	Maximum
Frequency Range				
(LO) Carrier	851-869 MHz	—	—	—
I/Q	DC - 10 MHz	—	—	—
LO Carrier Suppression *	dBc	40	30	—
SSB Rejection *	dBc	35	30	—
Harmonic Suppression *				
3 x I/Q	dBc	45	35	—
5 x I/Q	dBc	55	45	—
Conversion Loss	dB	6.5	—	9
LO—RF Isolation	dB	45	20	—
(LO) Carrier Power	dBm	+10 ± 1	—	—
I/Q Drive Level	dBm	-10.0	—	—

* Note: When Q = -90 degrees relative to I: Lower sideband is suppressed. Related to wanted sideband power.

S 1575 A

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PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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• **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588

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Operating Characteristics

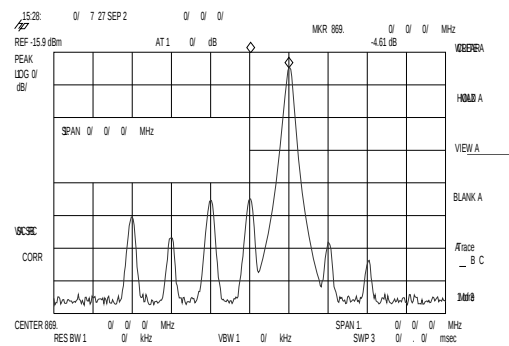
Impedance	50 Ohms Nominal
Parameter	Absolute Maximum
Operating Temperature	-10°C to +70°C
Storage Temperature	-55°C to +100°C
Pin Temperature (10 Sec)	260°C

Functional Configuration

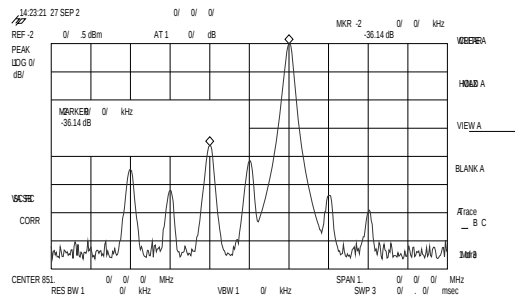
Function	Pin No.
LO	1
RF	8
I	5
Q	6
External 50 Ohms	—
Case Ground	2,3,4,7
Not Connected	—

Typical Performance @ +25°C

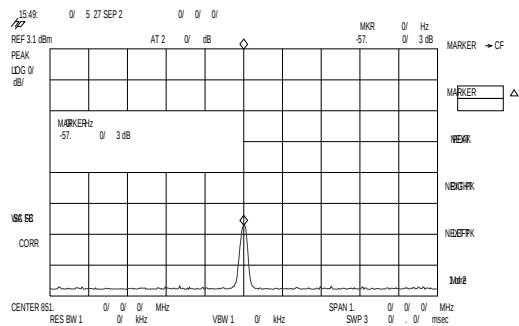
Conversion Loss



Suppression



L-R Isolation



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