

Attenuator, Voltage Variable
2.0—15.5 GHz

M/A-COM Products
Advanced: Rev. A

Features

- 35 dBm Input IP3
- 4.5 dB insertion Loss
- 31 dB Attenuation Range
- 12 dB Return Losses
- 3 mm, 16 Lead QFN Package
- RoHS Compliant
- MSL 1

Description

The MAAV-008988-PKG003 is a broadband Voltage Variable Attenuator for applications requiring high dynamic range and linearity. This VVA is unidirectional. The designated input must be used to achieve the P1dB and IP3 performance over the attenuation range.

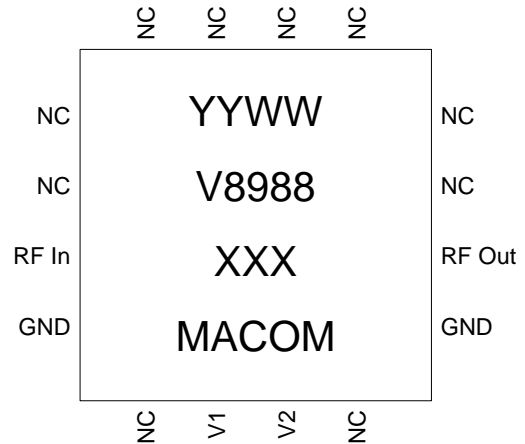
The RoHS compliant QFN package is compatible with 260°C reflow temperatures and has an MSL 1 rating. The MTTF is greater than 1,000,000 hours over the full operating temperature range of -40 to +85°C.

Electrical Specifications: $Z_0 = 50\Omega$

Parameter	Units	Typical
Bandwidth	GHz	2.0-15.5
Insertion Loss	dB	4.5
Attenuation Range	dB	31
Input Return Loss	dB	12
Output Return Loss	dB	12
Input IP3	dBm	35
Input P1dB	dBm	28
Control Voltages	V	0 to -3

Minimum attenuation at V1=0V and V2=-3V
Maximum attenuation at V1=-3V and V2=0V

Product Drawing



Absolute Maximum Ratings

Parameter	Absolute Maximum
Storage Temperature	-55°C to +150°C
Case Temperature	-40°C to +85°C
Junction Temperature	+150°C
Input Power	+32 dBm
Control Voltages	0 to -6V
ESD Level (HBM)	250V

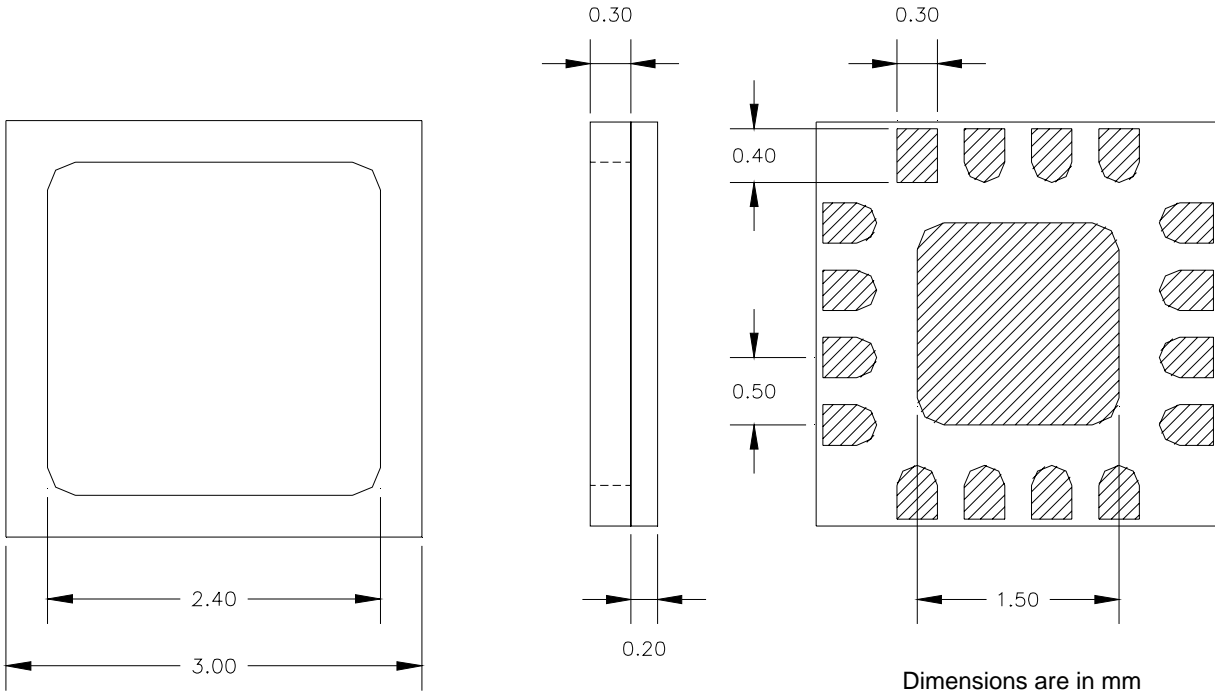
Ordering Information

Part Number	Package
MAAV-008988-PKG003	3 mm, 16 Lead QFN
MAAV-008988-SMB003	Evaluation Sample Board
MAAV-008988-DIE000	Bare Die

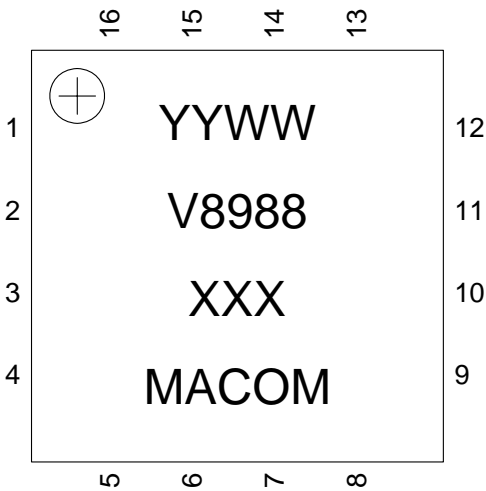
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Outline Drawing



Pin Designations



Pin	Function	Pin	Function
1	NC	9	GND
2	NC	10	RF Out
3	RF In	11	NC
4	GND	12	NC
5	NC	13	NC
6	V1	14	NC
7	V2	15	NC
8	NC	16	NC

Exposed pad on bottom is ground

ADVANCED: Data Sheets contain information regarding a product M/A-COM is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM 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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