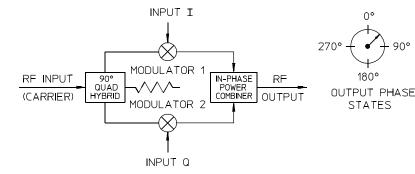
VMP-2R Series

VECTOR I&Q MODULATORS

10 to 1000 MHz / Narrowband QPSK / For MSK Systems / 10% Bandwidth / Hermetic PC Package



PRINCIPAL SPECIFICATIONS		
Center Frequency, f _{o,} MHz	Usable RF Bandwidth	
10 - 1000	10% of f _o	
	Center Frequency, f _{o,} MHz	

General Notes:

1. A vector modulator is used to phase modulate an RF carrier with complex analog signals.

2. Merrimac Vector Modulators consist of a quadrature hybrid and an in-phase power divider.

3. Units in the VMP-2R series are capable of modulating the carrier at up to 10% of the RF bandwidth.

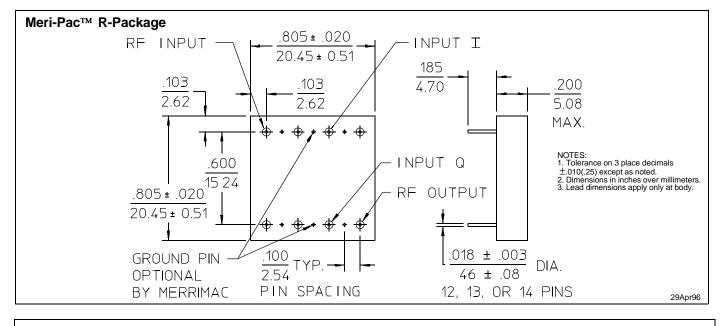
4. These vector modulators comply with the relevant sections of MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

GENERAL SPECIFICATIONS

RF Input:	+10 dBm, nom.
Modulation Inputs:	0 dBm max.
VSWR:	1.5:1 max.
Impedance:	50 Ω nom.
Insertion Loss:	12 dB max.
(below modulation input)	
Modulation Accuracy	
(measured @ 4 quadrants, 0 dBm input)	
Amplitude Balance:	1 dB
Phase Balance:	$\pm 5^{\circ}$
Carrier Isolation:	35 dB typ.
Dynamic Range (output):	20 dB nom.
Operating Temperature:	– 55° to +85°C

AVAILABLE OPTIONS

Close tolerance phase and amplitude balance versions are available in custom designs. Units with higher center frequency (e.g.,1500 MHz to 3 GHz) are available in the VMP-2S series.



For further information contact MERRIMAC /41 Fairfield Pl.,West Callwell,NJ,07006 / 973-575-1300 /FAX 973-575-0531