VMP-2S SERIES – VECTOR I&Q MODULATOR

TECHNICAL FEATURE

FEATURES

- 1.5 to 3 GHz Center Frequency
- Narrowband QPSK
- For MSK Systems
- 10% BW
- Heremetic PC Package

INPUT I MODULATOR 1 POWER POWER OUTPUT MODULATOR 2 INPUT Q	270° 180° OUTPUT PHASE STATES

PRIN	CIPAL SPECIFICAT	TIONS
Model Number	Center Frequency, f _o , GHz	Usable RF Bandwidth
VMP-2S-***B	1.5 - 3	10% of fo

General Notes:

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

 $\ensuremath{\text{2.Merrimac}}$ Vector Modulators consist of a quadrature hybrid and an in-phase power divider.

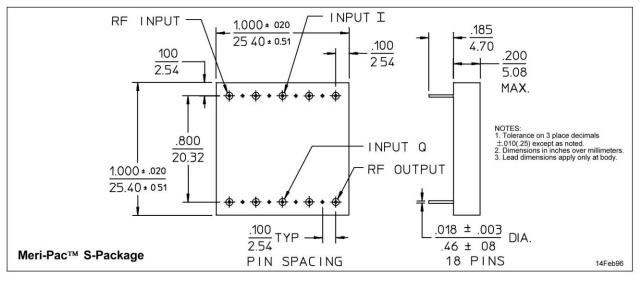
3. Units in the VMP-2S series are capable of modulating the carrier at up to 10% of the RF bandwidth.

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			
(below modulation input):	12 dB max.		
Modulation Accuracy			
(measured @ 4 quadrants, 0 dBm input)			
Amplitude Balance:	1 dB		
Phase Balance:	± 7°		
Carrier Isolation:	30 dB typ.		
Dynamic Range (output):	20 dB nom.		
Weight, nominal:	0.35 oz (10 g)		
Operating Temperature:	– 55° to +85°C		

AVAILABLE OPTIONS

Close tolerance phase and amplitude balance versions are available in custom designs. Units with lower center frequency (e.g., 10 MHz to 1 GHz) are available in the VMP-2R series



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