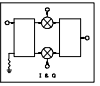
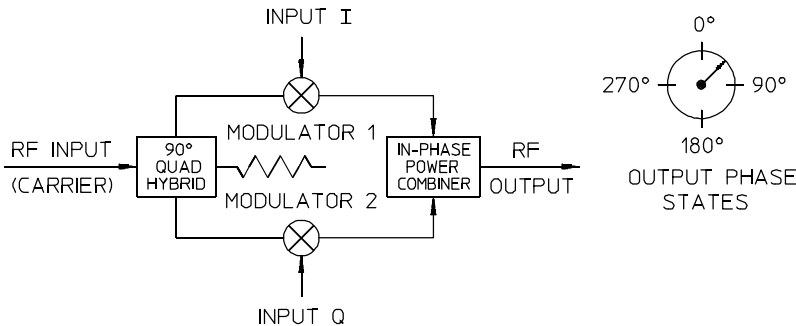


VMP-2S Series

VECTOR I&Q MODULATORS

1.5 to 3 GHz Center Freq / Narrowband QPSK / For MSK Systems / 10% BW / Hermetic PC Package



PRINCIPAL SPECIFICATIONS

Model Number	Center Frequency, f_0 , GHz	Usable RF Bandwidth
VMP-2S-***B	1.5 - 3	10% of f_0

For complete Model Number replace *** with desired Center Frequency, f_0 in MHz.

General Notes:

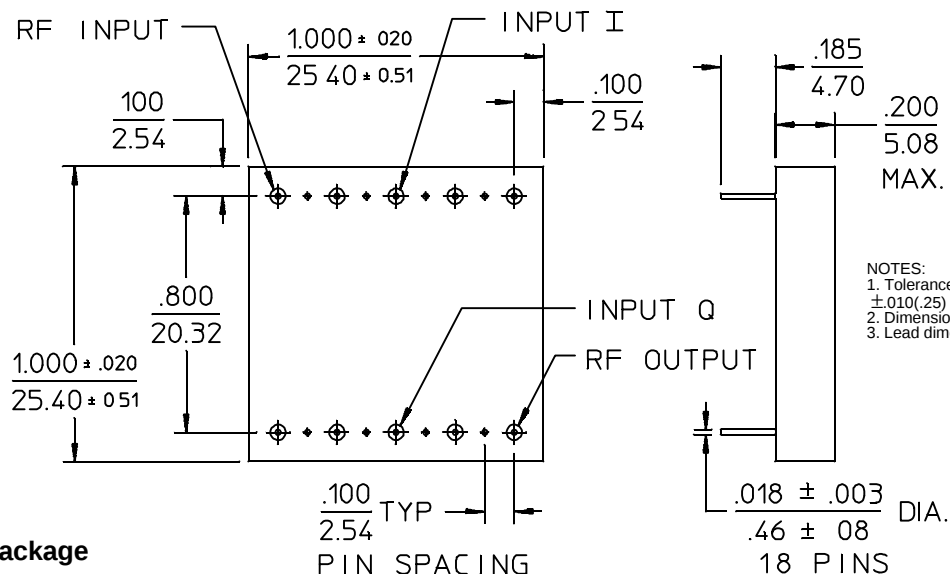
1. A vector modulator is used to phase modulate an RF carrier with complex analog signals.
2. Merrimac Vector Modulators consist of a quadrature hybrid and an in-phase power divider.
3. Units in the VMP-2S series are capable of modulating the carrier at up to 10% of the RF bandwidth.
4. These vector 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:	$\pm 7^\circ$
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



NOTES:
1. Tolerance on 3 place decimals $\pm .010$ (.25) except as noted.
2. Dimensions in inches over millimeters.
3. Lead dimensions apply only at body.

Meri-Pac™ S-Package

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