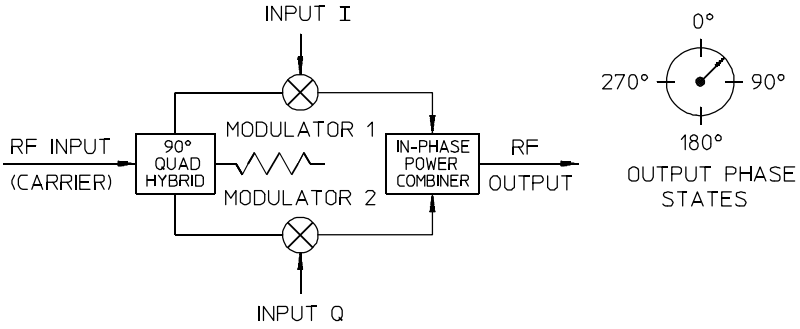
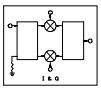
VMP-2S Series VECTOR I&Q MODULATORS

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





PRINCIPAL SPECIFICATIONS

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

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

GENERAL SPECIFICATIONS

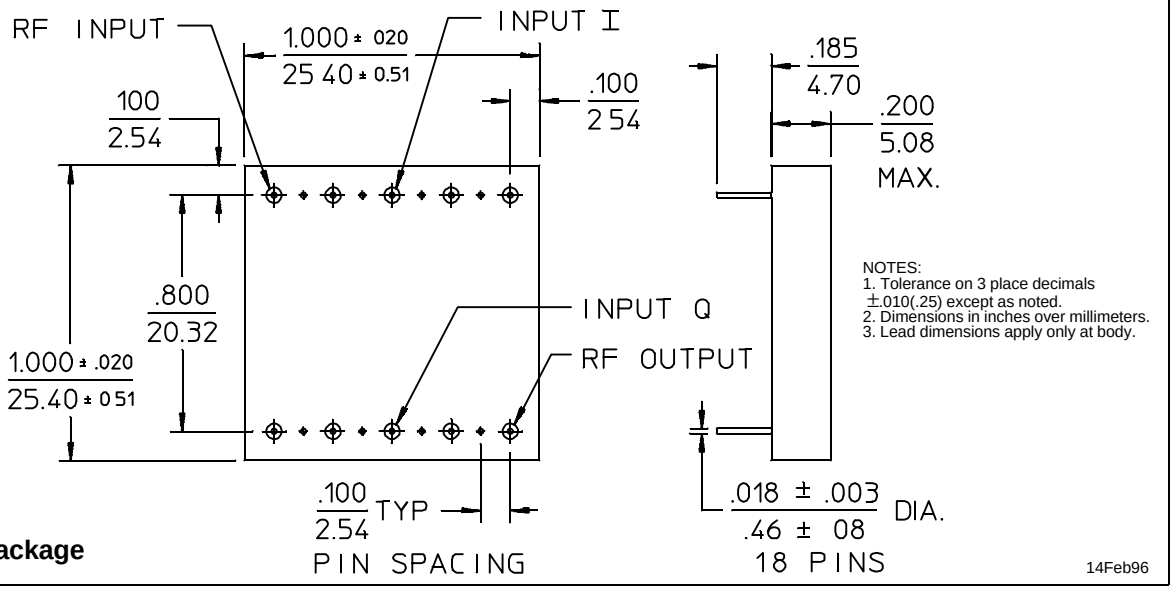
RF Input:	+10 dBm, nom.
Modulation Inputs:	0 dBm max.
VSWR:	1.5:1 max.
Impedance:	50 Ω nom.
Insertion Loss (below modulation input):	12 dB max.
Modulation Accuracy (measured @ 4 quadrants, 0 dBm input)	
Amplitude Balance:	1 dB
Phase Balance:	± 7°
Carrier Isolation:	30 dB typ.
Dynamic Range (output):	20 dB nom.
Weight, nominal:	0.35 oz (10 g)
Operating Temperature:	– 55° to +85°C

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.

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



Meri-Pac™ S-Package

14Feb96

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