



# VMF-2E-160 SQ I&Q MODULATOR

REV: 001, 04/06/01

- SPACE QUALIFIED
- HIGH ACCURACY
- HI-REL FLATPACK



## TECHNICAL DESCRIPTION / APPLICATION

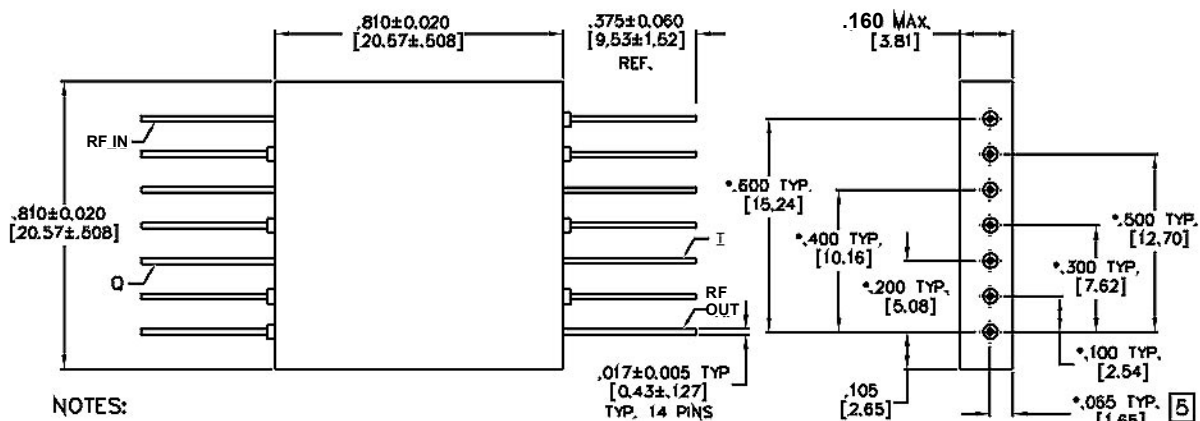
I & Q modulators are integrated devices that produce linear phase modulation of an RF carrier. In the VMF Series, specially optimized circuits are used to provide superior performance across very wide bandwidths and high data rates. This has been designed, manufactured and qualified per Merrimac document CENG-0001, "Standard Design Requirements for Space Qualified Devices".

SERIES 05

## GENERAL SPECIFICATIONS

MODEL NUMBER	RF INPUT MHz	RF INPUT POWER dB		PHASE BALANCE	AMPLITUDE BALANCE dB	CONVERSION LOSS		VSWR RF / LO		LO POWER LEVEL dBm
		MIN.	MAX.			TYP.	MAX.	TYP.	MAX.	
VMF-2E-160 SQ	160	+10	+13	$\pm 5^\circ$	1.0	10 dB	12 dB	1.3:1	1.5:1	+10 - 13
I&Q POWER LEVEL	I&Q BANDWIDTH		INPUT INTERCEPT		IMPEDANCE		WEIGHT		OPERATING TEMPERATURE	
dBm MAX	MHz		dBm MIN.		NOM.		MAX.			
0	DC to 40		+14		50 OHM		10g		-55° to +85° C	

## PACKAGE OUTLINE



### NOTES:

1. TOLERANCE ON 3 PLACE DECIMALS  $\pm .010$  [.25mm] EXCEPT AS NOTED.
2. MAX. IS LARGEST DIMENSION ALLOWED.
3. DIMENSIONS = INCHES [mm]
4. METRIC EQUIVALENTS ARE TO THE NEAREST .01mm.
5. ALL LEADS TO BE WITHIN  $\pm .010$  [.25mm] OF EACH OTHER AT THIS DIMENSION.
6. DIMENSIONS MARKED WITH \* APPLY ONLY AT BODY
7. ALL UNMARKED PINS ARE CASE GROUND.