

- 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".

GENERAL SPECIFICATIONS										
MODEL NUMBER	RF INPUT	RF INPUT POWER dB		PHASE BALANCE	AMPLITUDE BALANCE	CONVERSION LOSS		VSWR RF / LO		LO POWER LEVEL
	MHz	MIN.	MAX.		dB	TYP.	MAX.	TYP.	MAX.	dBm
VMF-2E-340 SQ	340	+10	+13	± 5°	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 .160 MAX. ,810±0,020 [20,57±,508] .375±0.060 [9,53±1,52] [3.81] REF. RF IN-. 600 TYP. [15,24] .810±0.020 [20.57±.508] .500 TYP. [12,70] 4,400 TYP, Ι [10.16] 4,300 TYP, [7.62] 4,200 TYP. [5.08] -OUT •,100 TYP, ,017±0,005 TYP [2.54] ,105 [2.65] [0.43±,127] \*,065 TYP. [5] NOTES: TYP, 14 PINS TOLERANCE ON 3 PLACE DECIMALS ±.010 [.25mm] ALL LEADS TO BE WITHIN ±.010 [.25mm] OF EACH EXCEPT AS NOTED. OTHER AT THIS DIMENSION. DIMENSIONS MARKED WITH \* APPLY ONLY AT BODY MAX. IS LARGEST DIMENSION ALLOWED. 3. DIMENSIONS = INCHES [mm] 7. ALL UNMARKED PINS ARE CASE GROUND. 4. METRIC EQUIVALENTS ARE TO THE NEAREST .01mm.