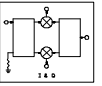
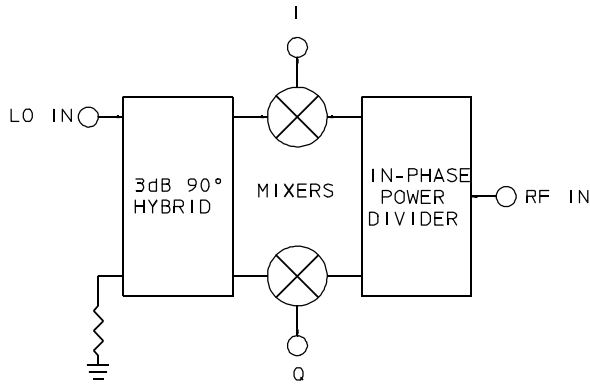


# IQM-20B Series

# I&Q NETWORKS

1.2 to 2.5 GHz / Minimum 10% Bandwidth / Excellent Phase and Amplitude Balance / SMA Package

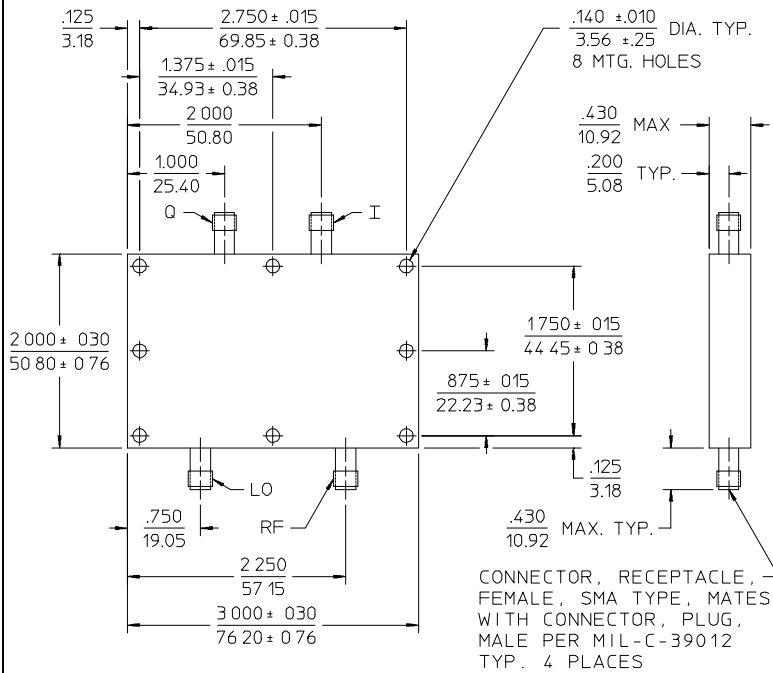


## PRINCIPAL SPECIFICATIONS

Model Number	RF/LO Center Freq., $f_0$ , GHz	RF Bandwidth	90° Phase Accuracy, 10% LO Band		Amplitude Balance, dB, 10% LO Band		Conver. Loss (RF to I or Q)		
			LO= $f_0$ Typ.	LO= $f_0$ Max.	LO= $f_0$ Typ.	LO= $f_0$ Max.	Typ.	Max.	
IQM-20B-****B	1.2 to 2.5	10% of $f_0$	$\pm 3^\circ$	$\pm 5^\circ$	$\pm 1^\circ$	$\pm 2^\circ$	0.3 0.5	0.1 0.2	10 dB 12 dB

For complete Model Number replace \*\*\*\* with desired Center frequency,  $f_0$  in MHz

## B-Package Outline



NOTES: 1. Tolerance on 3 place decimals  $\pm .030(.76)$  except as noted.  
2. Dimensions in inches over millimeters.

## GENERAL SPECIFICATIONS

Input VSWR: 1.5:1 max.  
 RF Input Power Level: 0 dBm nom.  
 LO Input Power Level: +10 dBm nom.  
 Video Bandwidth: DC to  $\dagger$ 100 MHz nom.  
 Weight, nominal: 3 oz (84 g)  
 Impedance: 50  $\Omega$  nom.  
 Operating Temp:  $-55^\circ$  to  $+85^\circ$ C  
 Higher Frequencies: See IQM-D series  
 $\dagger$ Video Bandwidth is typically much greater than 100 MHz

## General Notes:

1. I & Q networks are integrated networks that produce two quadrature phased, equal amplitude signals when fed RF and LO signals.
2. The IQM-2B and -20B series use both lumped element circuits and distributed circuit technologies for high performance in a proven flatpack design.
3. Merrimac I & Q Networks 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.

13Feb96