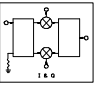
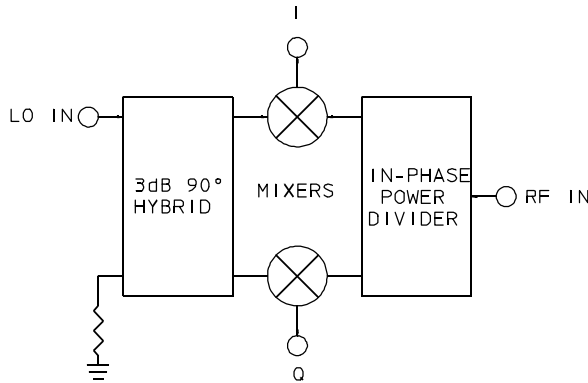


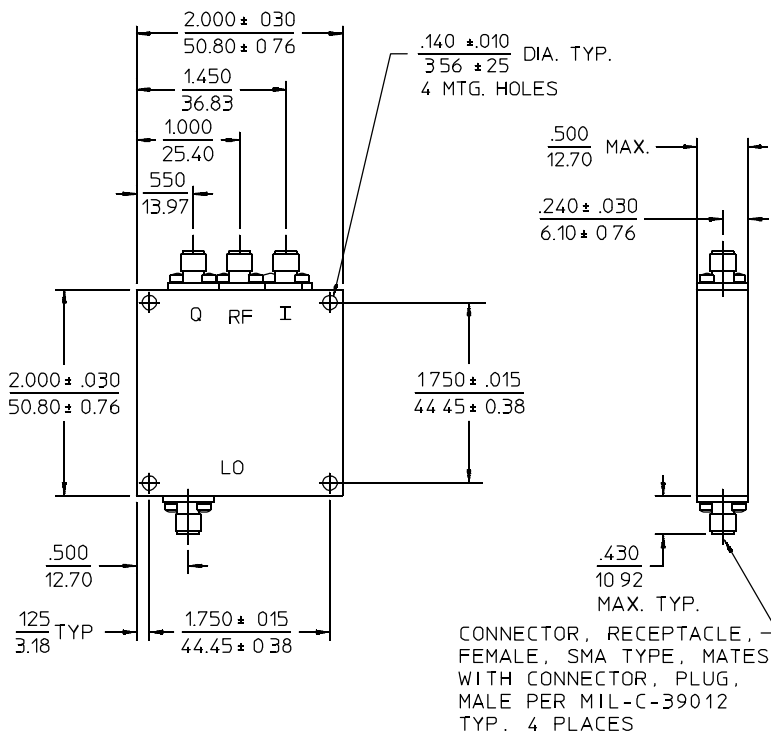
# IQM-2D Series

# I&Q NETWORKS

2.5 to 6.5 GHz / 10% Bandwidths / Excellent Phase and Amplitude Balance / Hi-Rel SMA Package



## D-Package Outline



NOTES: 1. Tolerance on 3 place decimals  $\pm .020(.51)$  except as noted.  
2. Dimensions in inches over mm.

## PRINCIPAL SPECIFICATIONS

Model Number	RF/LO Center Freq., $f_0$ , GHz	RF/LO Bandwidth MHz
IQM-2D-****B	2.5 to 6.5	10% of $f_0$

For complete model number replace \*\*\*\* with desired center freq.  $f_0$  in MHz

## GENERAL SPECIFICATIONS

### RF/LO Input Characteristics

Impedance:	50 $\Omega$ nom.
VSWR: 10% BW:	1.5:1 max.
RF Power Level:	0 dBm nom.
LO Power Level:	+10 dBm nom.

### I & Q Output Characteristics

90° Phase Balance:	$\pm 3^\circ$ typ., $\pm 5^\circ$ max.
For $f_L > f_R$ :	$I=0^\circ, Q=+90^\circ$
Amplitude Balance:	0.3 dB typ., 0.5 dB max.
Video Bandwidth, nom:	DC to 500 MHz
Output Impedance:	50 $\Omega$ nom.
Conversion Loss:	10 dB typ., 12 dB max.
Weight, nominal:	3 oz (84 g)
Operating Temperature:	-55° to +85°C

## AVAILABLE OPTIONS

2° and 0.2 dB Versions:	For fixed LO
Wider Bandwidths:	Contact factory

## 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-2D series of microwave I&Q networks uses both lumped element circuits and distributed circuit technology for small size and high performance.
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.

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