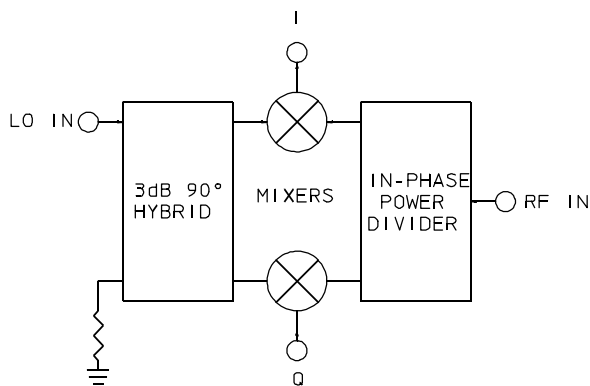


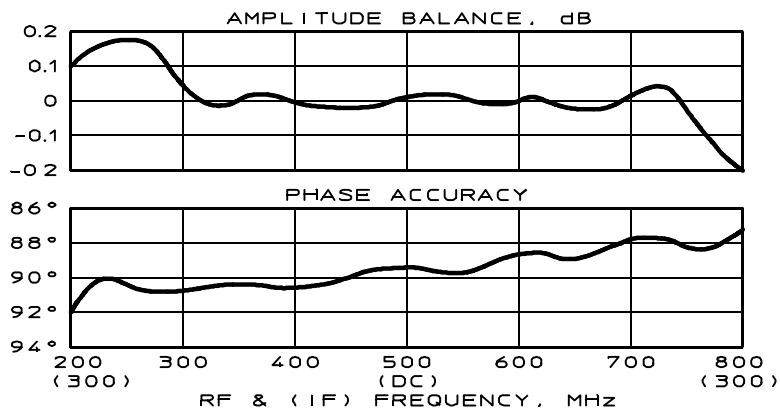
IQP-20R Series

I&Q NETWORKS

Units to 1 GHz / Precision Phase and Amplitude Balance / Hi-Rel Meri-Pac



Performance over Video Bandwidth (LO at 500 MHz)



PRINCIPAL SPECIFICATIONS

Model Number	LO Frequency, f_0 , MHz	Video Bandwidth
IQP-20R-60B	60	†50 MHz
IQP-20R-***B	20 - 160	†50 MHz
IQP-20R-***B	160 - 1000	†100 MHz

For complete Model Number replace ***with desired LO Center Frequency, f_0 in MHz.

GENERAL SPECIFICATIONS

RF/LO Input Characteristics

†RF Bandwidth:	10% of f_0
Impedance:	50 Ω nom.
VSWR:	1.5:1 max.
RF Power Level:	0 dBm nom.
LO Power Level @ f_0 :	+10 dBm nom.

Conversion Loss

(RF to I or Q):	10 dB typ., 12 dB max.
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IF Quadrature Balance (I to Q) @ 100 kHz IF

Phase, @ $LO=f_0$:	$\pm 1^\circ$ nom., $\pm 2^\circ$ max.
Phase, @ $LO=f_0 \pm 5\%$:	$\pm 3^\circ$ nom., $\pm 5^\circ$ max.

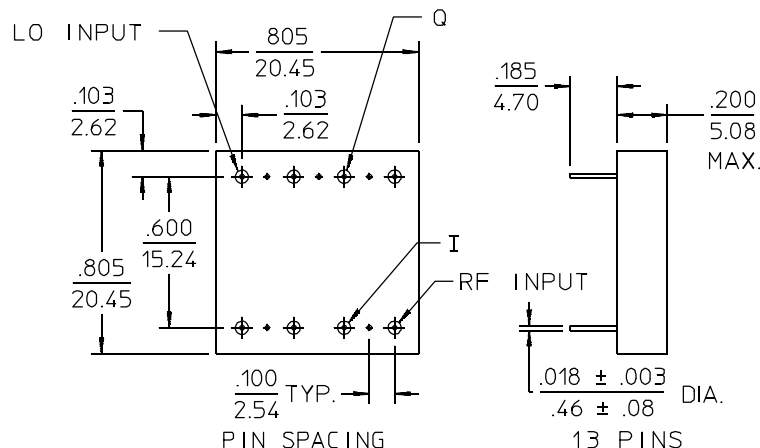
Ampl., @ $LO=f_0$:	0.2 dB max.
Ampl., @ $LO=f_0 \pm 5\%$:	0.5 dB max.

Weight, nominal: 0.32 oz (9 g)

Operating Temperature: -55° to $+85^\circ\text{C}$

†RF and Video Bandwidths are typically much greater than specified.

Outline of R - Size Meri-Pac™



- NOTES:
1. Tolerance on 3 place decimals $\pm .010(.25)$ except as noted.
 2. Dimensions in inches over millimeters.
 3. Dimensions marked with * apply only at body.
 4. All unmarked pins are case ground.

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 IQP-20R series are precision tuned at a specified LO to yield excellent phase and amplitude balance values across a 10% LO bandwidth.
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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