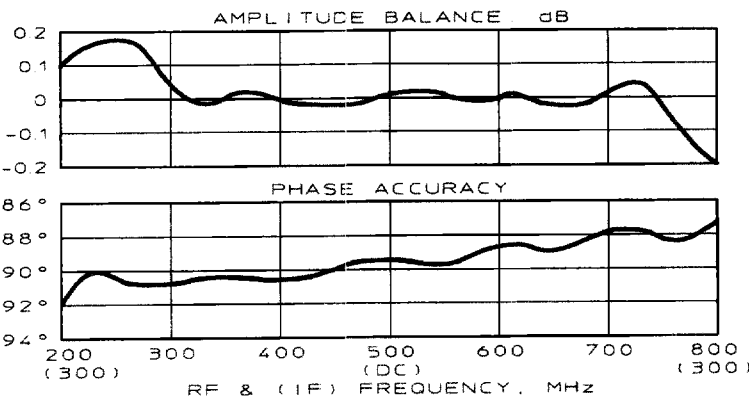


Performance over Video Bandwidth (LO at 500 MHz)



PRINCIPAL SPECIFICATIONS

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

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

GENERAL SPECIFICATIONS

RF/LO Input Characteristics

- \dagger 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.

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.

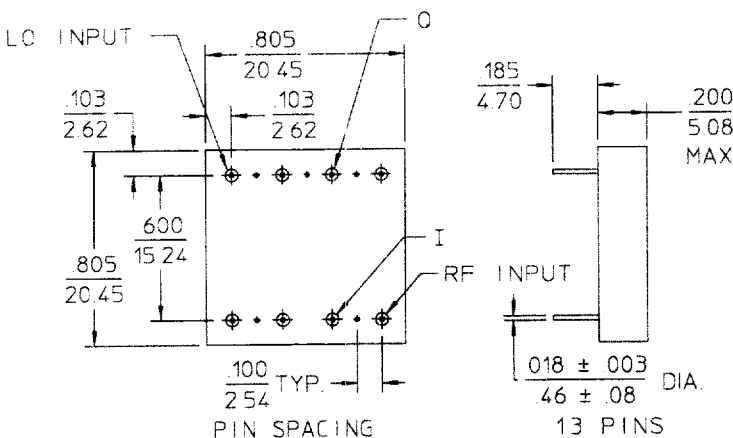
- Ampl., @ $LO=f_0$: 0.2 dB max.
- Ampl., @ $LO=f_0 \pm 5\%$: 0.5 dB max.

Weight, nominal: 0.32 oz (9 g)

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

\dagger 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.