



PRINCIPAL SPECIFICATIONS

Model Number	LO Frequency MHz	†RF BW MHz
IQP-20S-***B	1500 to 3000	10% of f_0

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

GENERAL SPECIFICATIONS

RF/LO Input Characteristics

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

I & Q Output Characteristics

Video Bandwidth, nom.: DC to †250 MHz
 Output Impedance: 50 Ω nom.

Conversion Loss
 (RF to I or Q): 10 dB typ.
 12 dB max.

IF Quadrature Balance(I to Q)@100 kHz IF

Phase, @ $LO = f_0$: ±1° typ., ±2° max.
 Phase, @ $LO = f_0 \pm 5\%$: ±3° typ., ±5° max.
 Ampl., @ $LO = f_0$: 0.2 dB max.
 Ampl., @ $LO = f_0 \pm 5\%$: 0.5 dB max.

Weight, nominal: 0.35 oz (10 g)

Operating Temperature: -55° to +85°C

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

General Notes:

- I & Q networks are integrated networks that produce two quadrature phased, equal amplitude signals when fed RF and LO signals.
- The IQP-20S series are precision tuned at a specific LO frequency to yield excellent phase and amplitude balance across a 10% bandwidth.
- 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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