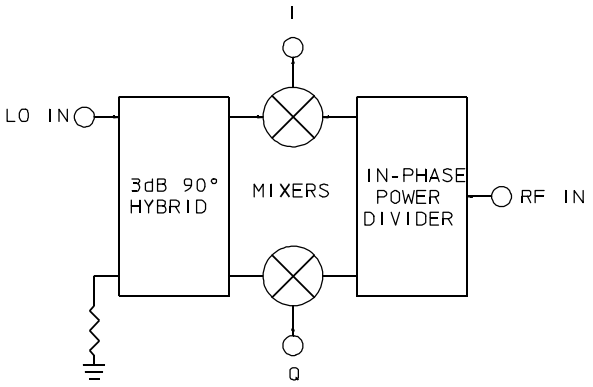
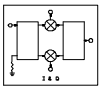
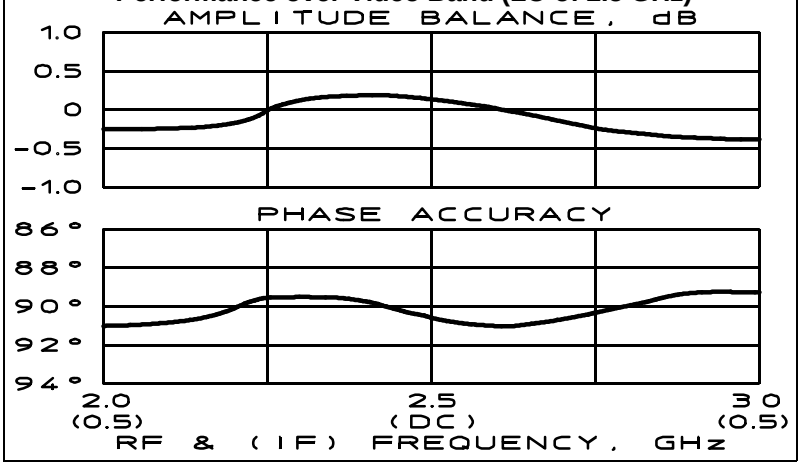
IQP-20S Series I&Q NETWORKS

1.5 to 3 GHz / Precision Phase and Amplitude Balance / Hermetic, Hi-Rel Package

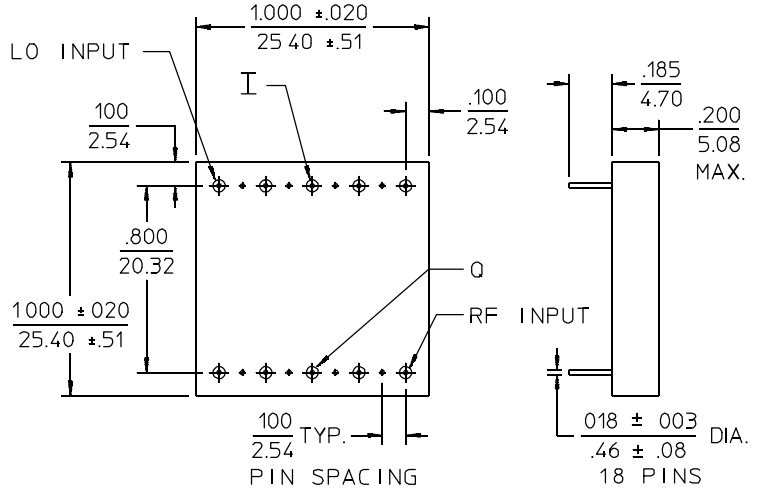




Performance over Video Band (LO of 2.5 GHz)



Outline of S-size Meri-Pac™



NOTES:
1. Tolerance on 3 place decimals ±.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.

PRINCIPAL SPECIFICATIONS

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

For complete Model Number replace *** with desired LO Center Frequency, f_o 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_o:	+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_o:	±1° typ.,±2° max.
Phase, @ LO= f_o±5%:	±3° typ.,±5° max.
Ampl., @ LO= f_o:	0.2 dB max.
Ampl., @ LO= f_o±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:

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

13Feb96

For further information contact: ***MERRIMAC / 41 Fairfield Pl, West Caldwell, NJ, 07006 / 973-575-1300 / FAX 973-575-0531***