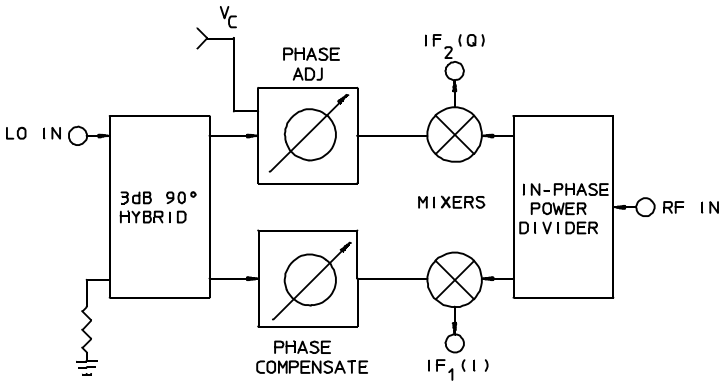
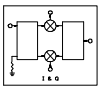
IQP-25S Series I&Q NETWORKS

Units to 1 GHz / 10% Bandwidth / In-Circuit, Voltage Controlled Phase Balance / Hi-Rel Hermetic Pkg





PRINCIPAL SPECIFICATIONS

Model Number	Center Freq f_o, MHz	†Bandwidth RF Input
IQP-25S-***B	20 – 1000	10% of f_o

For complete model number replace ***with desired LO freq, f_o in MHz.

General Notes:

1. I & Q networks are integrated devices that produce two quadrature-phased, equal amplitude signals when fed RF and LO signals.

2. The IQP-25S series features an in-circuit, voltage controlled phase balance that allows fine adjustment of phase. This feature provides accuracy not previously attainable in a comparably small package. In addition, the voltage controlled phase balance input facilitates closed loop, servo operation using the phase adjustment input as feedback.

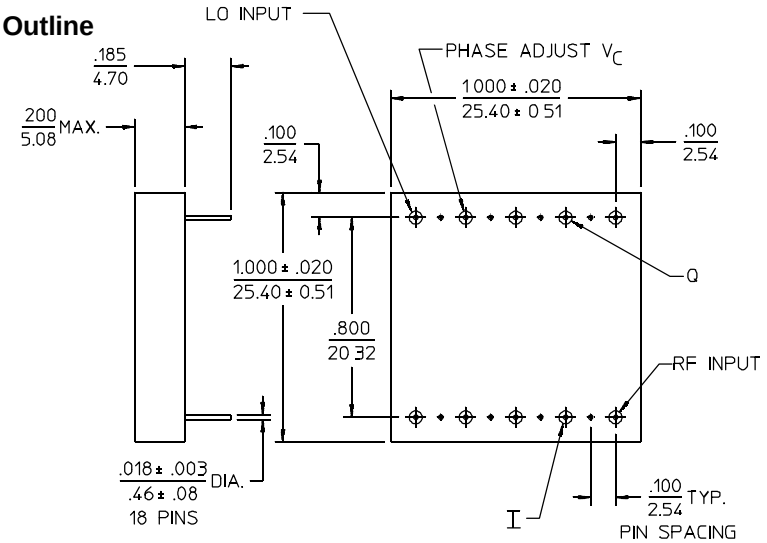
3. Merrimac I & Q networks comply with the relevant sections of MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

GENERAL SPECIFICATIONS

RF and LO Input Characteristics	
Impedance:	50 Ω nom.
VSWR:	1.5:1 max.
RF Power Level:	0 dBm nom.
LO Power Level:	+10 dBm nom.
I & Q Output Characteristics	
Video Bandwidth, nom:	DC to †50 MHz
Output Impedance:	50 Ω nom.
Conversion Loss	
(RF to I or Q):	10 dB typ., 12 dB max.
IF Balance (I to Q)	
Phase, @ V_C=+5V:	90° ± 2°
Bias Control:	0 to +15V
Adjustable Range:	± 10° nom.
Sensitivity:	5°/V nom.
Temperature Stability:	± 1° max.
Amplitude:	0.2 dB max.
Weight, nominal:	0.35 oz (10g)
Operating Temp:	-- 55° to +85°C

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

Meri-Pac™ S-Package Outline



NOTES:
1. Tolerance on 3 place decimals ±.010(.25) except as noted.
2. Dimensions in inches over millimeters.
3. Lead dimensions apply only at body.
4. All unmarked pins are case ground.

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