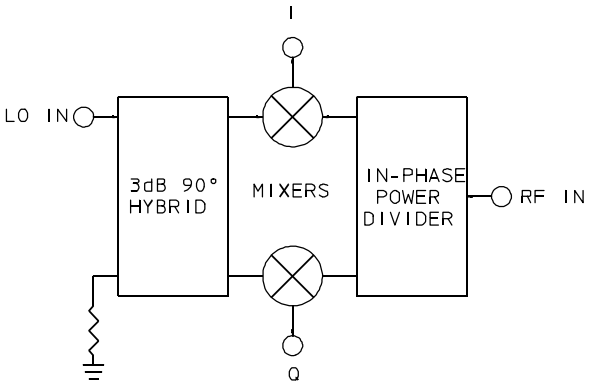
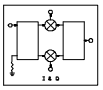
IQF-9L-500 I&Q NETWORK

30 to 1000 MHz / Ultra Wideband Suitable For Spread Spectrum / Hi-Rel Flatpack





PRINCIPAL SPECIFICATIONS

Model Number	LO/RF Bandwidth, MHz	Phase Balance	Amplitude Balance, dB
IQF-9L-500	30 - 1000	90° ± 5°	0.5

General Notes

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

2. In the IQF-9L, specially designed lead/lag circuits are used to provide superior performance across very wide bandwidths as is required in spread spectrum communications systems.

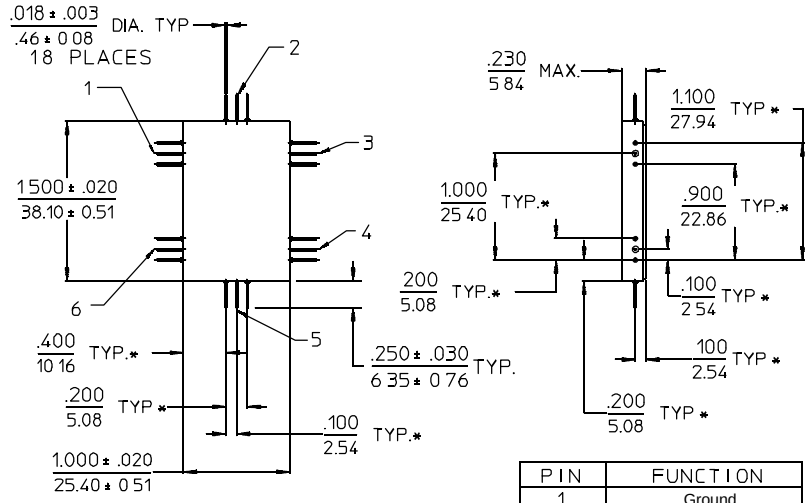
3. These units comply with the relevant sections of MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

GENERAL SPECIFICATIONS

RF and LO Input Characteristics	
Impedance:	50 Ω nom.
VSWR:	1.3:1 typ. 1.7:1 max.
RF Power Level:	0 dBm max.
LO Power Level:	+11.5 dBm nom.*
I & Q Output Characteristics	
Video Bandwidth:	DC to †100 MHz
Two Tone, 3rd Order Input Intercept:	+16 dBm typ.
Output Impedance:	50 Ω nom.
Conversion Loss (RF to I or Q):	10 dB typ., 12 dB max.
Weight, nominal:	0.55 oz (15.4 g)
Operating Temp:	– 55° to +85°C

†Video Bandwidth is typically much greater than specified.
*Higher LO Power versions available to special order.

L - Package Outline



PIN	FUNCTION
1	Ground
2	LO Input
3	Ground
4	Q Output
5	RF Input
6	I Output

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.

13Feb96

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