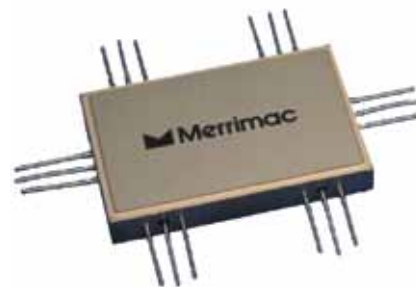


# I&Q NETWORK - IQF-9L-500 SQ

## TECHNICAL FEATURE

### FEATURES

- Space Qualified
- 30 - 1000 MHz
- Ultra Wideband
- Hi-Rel Flatpack



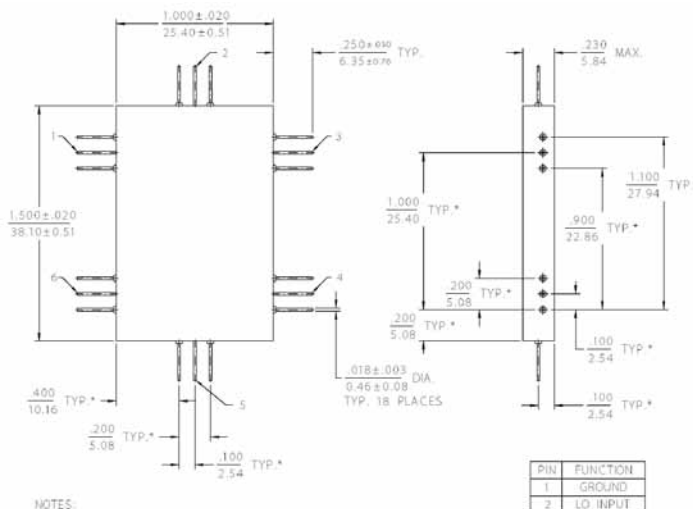
### PERFORMANCE

LO/RF Bandwidth .....	30 - 1000 MHz
Phase Balance .....	90° ± 7°
Amplitude Balance .....	0.75 dB
Conversion Loss.....	10 dB typ., 12 dB max.
VSWR RF/LO .....	1.3:1 typ., 1.7:1 max.
LO Power Level.....	+10 - 13
RF Power Level.....	0 dB max.
Video Bandwidth .....	DC - 100 MHz
Input Intercept .....	+14 dBm min.
Impedance.....	50 Ohm nom.
Operating Temperature .....	-55° to +85° C

### DESCRIPTION

I & Q networks are integrated devices that produce two quadrature-phased equal amplitude signals when fed RF and LO signals. 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. This has been designed, manufactured and qualified per Merrimac document CENG-0001, "Standard Design Requirements for Space Qualified Devices".

### PACKAGE OUTLINE



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