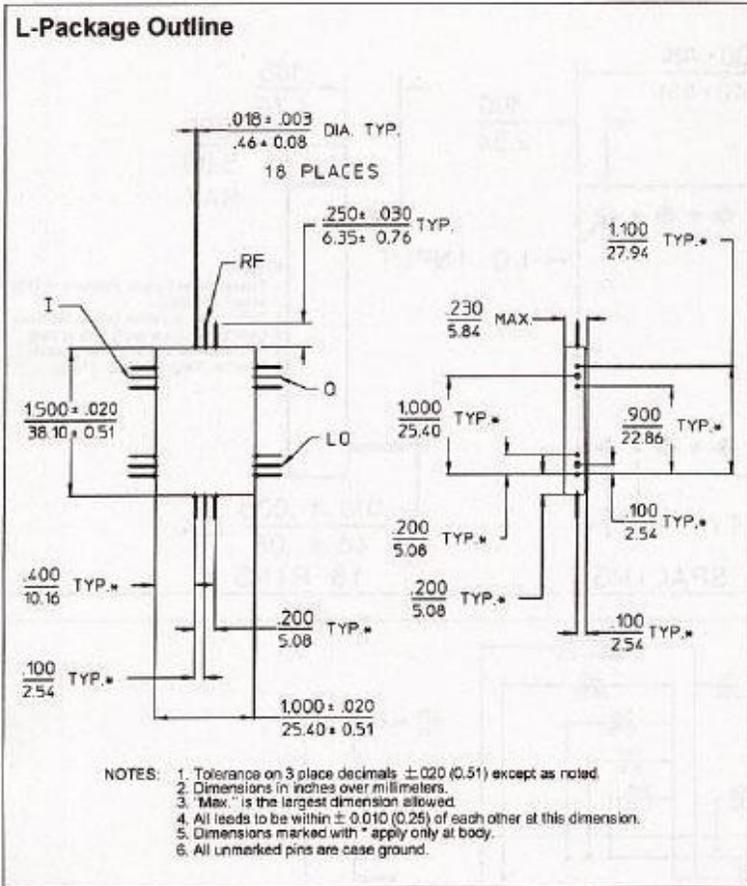
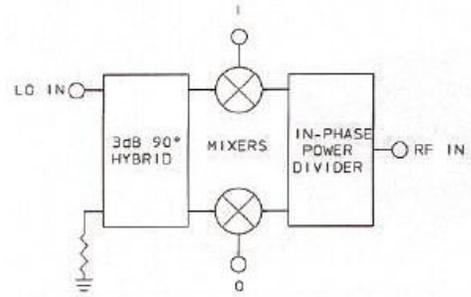


# IQF-3L-1000 – I&Q NETWORKS

## TECHNICAL FEATURE

### FEATURES

- 750 to 1250 MHz
- Excellent Phase and Amplitude Balance
- Hermetic Hi-Rel Package



**PRINCIPAL SPECIFICATIONS**

Model Number	RF/LO Freq. Range, MHz	Bandwidth, MHz
IQF-3L-1000	750 - 1250	500

**GENERAL SPECIFICATIONS**

**RF/LO Input Characteristics**

- Impedance: 50  $\Omega$  nom.
- VSWR (RF, LO): 1.8:1 max.
- RF Power Level: 0 dBm max.
- LO Power Level: +10 dBm nom.

**I & Q Output Characteristics**

- 90° Phase Accuracy:  $\pm 3^\circ$ , typ.,  $\pm 5^\circ$  max.
- Amplitude Balance: 0.3 dB typ., 0.5 dB max.
- Video Bandwidth: DC to  $\uparrow$ 100 MHz nom.
- Output Impedance: 50  $\Omega$  nom.

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

**Weight, nominal:** 0.55 oz (15.6 g)

**Operating Temp:** -55° to +85°C

$\uparrow$ Video Bandwidth is typically much greater than 100 MHz

**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. The IQF-3L-1000 wideband microwave I & Q network uses both lumped and distributed circuit technologies to maximize high performance and is based on a reliable flatpack design.
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.

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