

# I&Q NETWORK - IQF-20E-70 SQ

## TECHNICAL FEATURE

### FEATURES

- Space Qualified
- High Accuracy
- Hi-Rel Flatpack



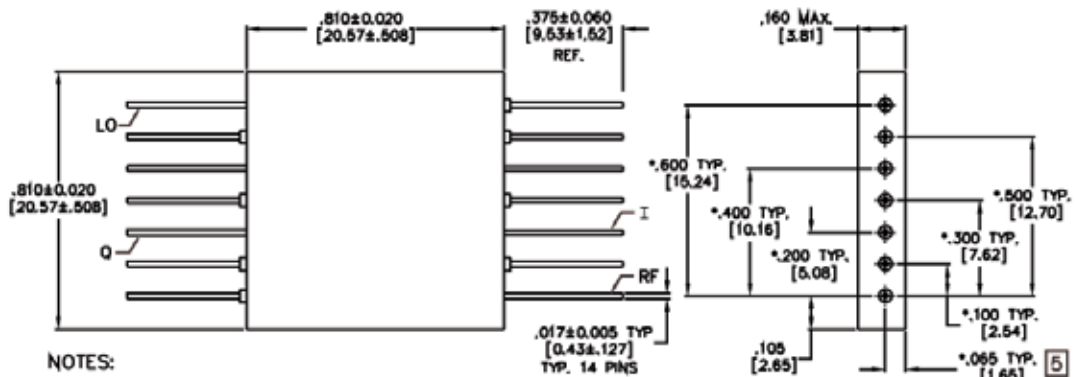
### PERFORMANCE

|                             |                        |
|-----------------------------|------------------------|
| LO/RF Bandwidth .....       | 70 MHz                 |
| RF Frequency .....          | 70 ± 7 MHz             |
| Phase Balance .....         | 90° ± 2°               |
| Amplitude Balance .....     | 0.2 dB                 |
| Conversion Loss .....       | 10 dB typ., 12 dB max. |
| VSWR RF/LO .....            | 1.3:1 typ., 1.5:1 max. |
| LO Power Level .....        | +10 - 13               |
| RF Power Level .....        | 0 dB max.              |
| Video Bandwidth .....       | DC - 10 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 Series, specially optimized circuits are used to provide superior performance across very wide bandwidths and high data rates. This unit has been designed, manufactured and qualified per Merrimac document CENG-0001, "Standard Design Requirements for Space Qualified Devices".

### PACKAGE OUTLINE



**NOTES:**

1. TOLERANCE ON 3 PLACE DECIMALS ±.010 [.25mm] EXCEPT AS NOTED.
2. MAX. IS LARGEST DIMENSION ALLOWED.
3. DIMENSIONS = INCHES [mm]
4. METRIC EQUIVALENTS ARE TO THE NEAREST .01mm.
5. ALL LEADS TO BE WITHIN ±.010 [.25mm] OF EACH OTHER AT THIS DIMENSION.
6. DIMENSIONS MARKED WITH \* APPLY ONLY AT BODY
7. ALL UNMARKED PINS ARE CASE GROUND.