



- SPACE QUALIFIED
- 30 TO 1000 MHz
- ULTRA WIDEBAND
- HI-REL FLATPACK



TECHNICAL DESCRIPTION / APPLICATION

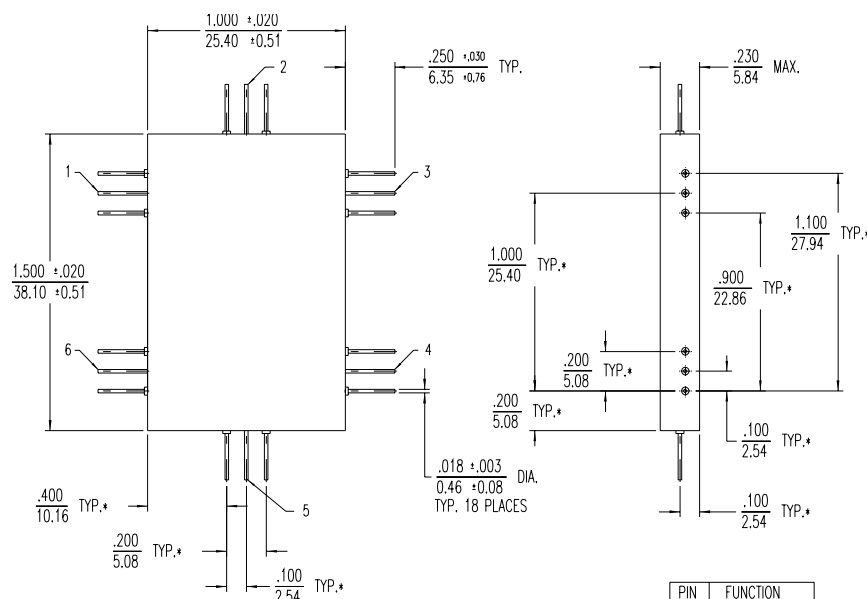
SERIES 05

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".

GENERAL SPECIFICATIONS

MODEL NUMBER	LO/RF BANDWIDTH MHz	PHASE BALANCE	AMPLITUDE BALANCE dB	CONVERSION LOSS		VSWR RF / LO		LO POWER LEVEL dBm
				TYP.	MAX.	TYP.	MAX.	
IQF-9L-500 SQ	30 - 1000	90° ± 7°	0.75	10 dB	12 dB	1.3:1	1.7:1	+10 - 13
RF POWER LEVEL dBm MAX	VIDEO BANDWIDTH MHz	INPUT INTERCEPT dBm MIN.	IMPEDANCE NOM.	WEIGHT MAX.		OPERATING TEMPERATURE		
0	DC to 100	+14	50 OHM	17g		-55° to +85 ° C		

PACKAGE OUTLINE



NOTES:

1. TOLERANCE ON 3 PLACE DECIMALS ±.010 (.25mm) EXCEPT AS NOTED.
2. DIMENSIONS IN INCHES OVER MILLIMETERS.
3. DIMENSIONS MARKED WITH * APPLY ONLY AT BODY.

PIN	FUNCTION
1	GROUND
2	LO INPUT
3	GROUND
4	Q OUTPUT
5	RF INPUT
6	I OUTPUT