



- SPACE QUALIFIED
- HIGH ACCURACY
- HI-REL FLATPACK



TECHNICAL DESCRIPTION / APPLICATION

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 has been designed, manufactured and qualified per Merrimac document CENG-0001, "Standard Design Requirements for Space Qualified Devices".

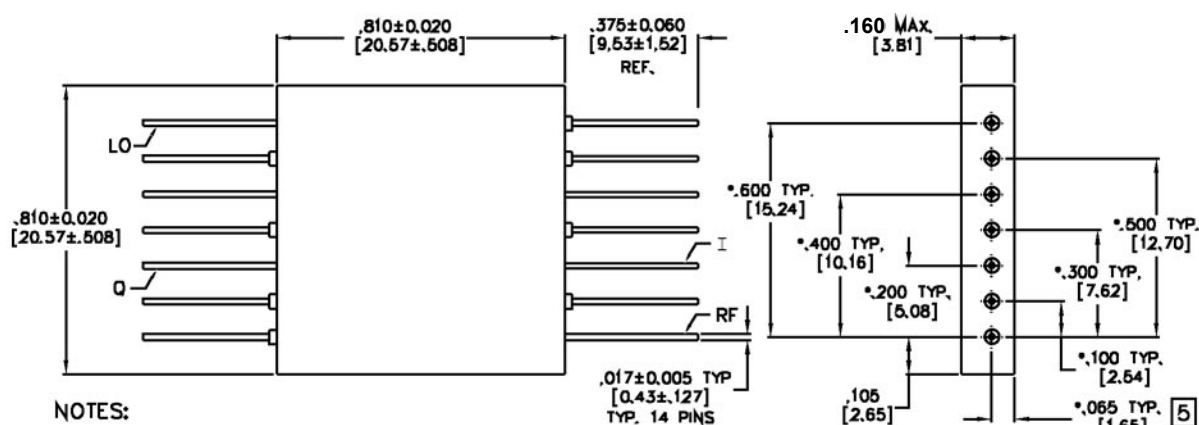
SERIES 05

GENERAL SPECIFICATIONS

MODEL NUMBER	LO FREQUENCY	RF FREQUENCY	PHASE BALANCE	AMPLITUDE BALANCE	CONVERSION LOSS		VSWR RF / LO		LO POWER LEVEL
	MHz	MHz		dB	TYP.	MAX.	TYP.	MAX.	dBm
IQF-20E-497 SQ	497	497 ± 100	90° ± 2°	0.2	10 dB	12 dB	1.3:1	1.5:1	+10 - 13
RF POWER LEVEL	VIDEO BANDWIDTH		INPUT INTERCEPT	IMPEDANCE	WEIGHT		OPERATING TEMPERATURE		
dBm MAX	MHz		dBm MIN.	NOM.	MAX.				
0	DC to 100		+14	50 OHM	10g		-55° to +85 ° C		

Phase Balance + Amplitude Balance are tested at I/Q=0.1MHz; designed to meet 90±5° and 0.5 dB over full DC-100 MHz bandwidth.

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.