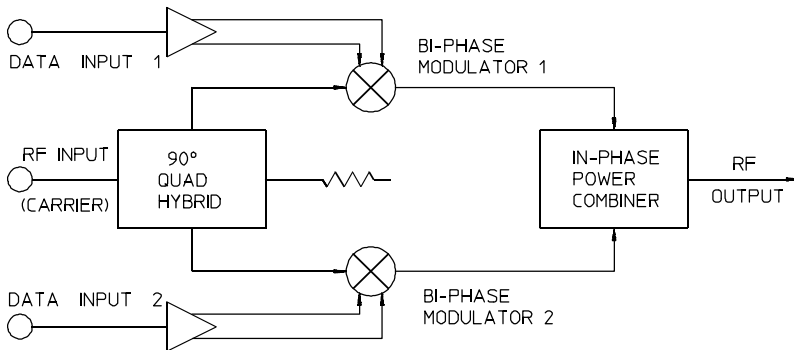
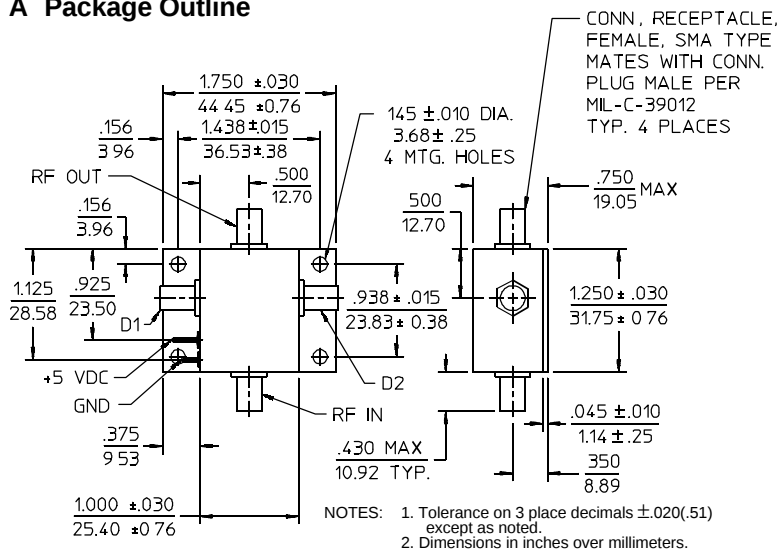
**PRINCIPAL SPECIFICATIONS**

Model Number	Center Freq, f_0 , MHz	RF Input Bandwidth	Amplitude Balance, dB, Max.	Phase Balance @: f_0 Band Limits	Insertion Loss, dB, Max.	VSWR Max.
JTM-2A-***B	10 to 200	10% of f_0	0.5	$\pm 2^\circ$ $\pm 4^\circ$	6	1.5:1
JTM-2A-***B	200 to 1000	10% of f_0	1.0	$\pm 3^\circ$ $\pm 5^\circ$	9	1.5:1

For complete Model Number replace *** with desired Center Frequency, f_0 in MHz.

A Package Outline**GENERAL SPECIFICATIONS**

Impedance:	50 Ω nom.
RF Input Level:	0 dBm nom.
Modulation Sequence	
TTL Data Ports 1,2:	0,0 : ref. 0°
	1,0 : -270°
	1,1 : -180°
	0,1 : -90°
Carrier Suppression:	30 dB nom.
Data Bandwidth:	DC to 50 MHz nom.
DC Power:	+5V @ 25 mA nom.
Weight, nominal:	2.2 oz (65 g)
Operating Temp:	-55° to $+85^\circ$ C

General Notes:

- Units in the JTM-2A series of Quadrature Modulators are composed of two biphase modulators with TTL drivers, a 90° quadrature hybrid and an inphase power combiner.
- These devices are generally used in systems to generate QPSK coded signals. The units accept two differential data inputs each of which independently biphase modulates an RF carrier. These are then combined to produce a quadrature output of 0, 90, 180 and 270° degrees.
- Units in the JTM-2A series are available with center frequencies from 10 to 1000 MHz and having a minimum bandwidth equal to 10% of the center frequency.
- Merrimac Quadrature Modulators 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.

29Apr96