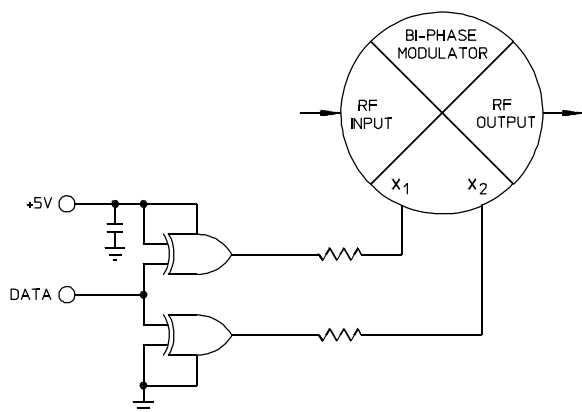


# BTF-2A-500

# BIPHASE MODULATOR

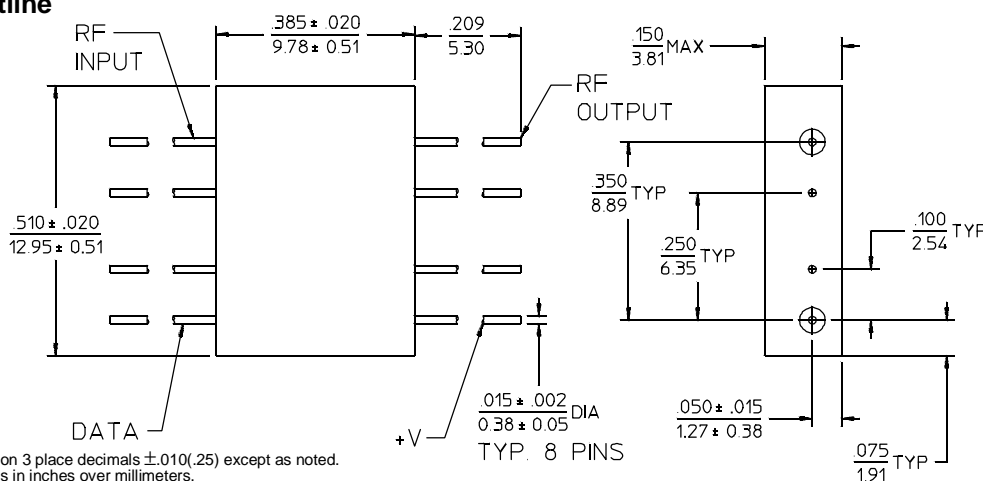
10 to 1000 MHz / Direct TTL Input / Fast Switching / Hermetic Package



## PRINCIPAL SPECIFICATIONS

Model Number	Frequency Range, MHz	Insertion Loss, dB		Amplitude Balance, dB		Phase Balance		Carrier Suppression, Typ.
		Max.	Typ.	Max.	Typ.	Max.	Typ.	
BTF-2A-500	10 – 500	3	2	0.3	0.20	±3°	±1°	- 25 dBc
	500 – 1000	4	3	0.5	0.20	±4°	±2°	- 25 dBc

## A-Package Outline



- NOTES: 1. Tolerance on 3 place decimals ±.010(.25) except as noted.  
 2. Dimensions in inches over millimeters.  
 3. Lead dimensions apply only at body.  
 4. All unmarked pins are case ground.

## General Notes:

- The BTF-2A-500 Biphase Modulator covers the frequency range of 10 to 1000 MHz and includes interfacing circuitry so it may be driven directly from standard TTL using a +5V supply.
- The BTF-2A-500 is available in a variety of alternative packages, logic circuit types (e.g., ECL) and frequency ranges. Customized versions are available for special frequency bands matched to your special applications.
- Merrimac Biphase Modulators cover a variety of frequency bands while providing wide bandwidths suitable for most applications.
- All units comply with applicable sections of MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

22Feb96

## GENERAL SPECIFICATIONS

Impedance:	50 Ω nom.
RF Input Level:	0 dBm max.
VSWR:	2.0:1 max.
Switching Speed:	5 nS typ.
50% Control to 90% RF	
Data Signal Levels:	TTL compatible
Supply Voltage:	+5 VDC
	@ 25 mA, nom.
Weight, nominal:	0.1 oz. (2.8 g)
Operating Temp:	- 55° to +85°C

## AVAILABLE OPTIONS

Custom Frequencies:	From 1 to 4000 MHz
Without TTL Driver:	As BPF series