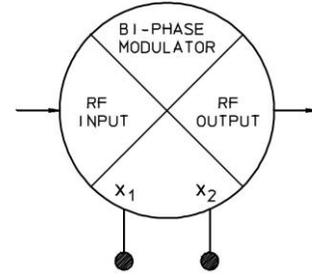


# BPG-2A-500, BIPHASE MODULATORS

## TECHNICAL FEATURE

### FEATURES

- 100 - 750 MHz
- ECL & TTL Compatible
- Fast Switching
- SMD Package



<b>PRINCIPAL SPECIFICATIONS</b>						
Model Number	Frequency Range, MHz	Insertion Loss, dB, Max. Typ.		Amplitude Balance, dB, Max. Typ.		Phase Balance Max. Typ.
BPG-2A-500	100 – 750	5	4	0.5	0.2	±5° ±2°
						Carrier Suppression Typ. – 30 dBc

**A-Size Surface Mount Outline**

PIN NO.	FUNCTION
1	RF OUT
2	GROUND
3	RF IN
4	X <sub>1</sub>
5	GROUND
6	X <sub>2</sub>

**NOTES:**

1. Tolerance on 3 place decimals ±0.10 (.25) except as noted.
2. Dimensions in inches over millimeters.
3. Max is largest dimension allowed
4. All unmarked tabs are case ground.
5. Untrimmed tab length 0.25 (6.35) nominal.

**General Notes:**

1. The BPG-2A-500 Biphase Modulator covers the frequency range of 100 to 750 MHz and is ideal for applications where space available for mixer installation is very limited. Other units operate up to 3.6 GHz and provide proportionately fast rise times.
2. Customized versions are available for special frequency bands matched to your special applications. Most units are available in a variety of alternative packages such as the TO-8, flatpack or connectorized packages. TTL or ECL drivers can be provided in the larger packages.
3. Merrimac Biphase Modulators cover a variety of frequency bands while providing wide bandwidths suitable for most applications.
4. All units comply with MIL-M-28837 and may be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

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<b>GENERAL SPECIFICATIONS</b>	
Impedance:	50 Ω nom.
RF Input Level:	– 3 dBm max.
VSWR:	2.0:1 max.
Switching Speed:	3 nS typ.
Data Levels:	Logic 1: +15 mA Logic 0: – 15 mA
Weight, nominal:	0.02 oz (0.5 g)
Operating Temperature:	– 55° to +85°C

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