

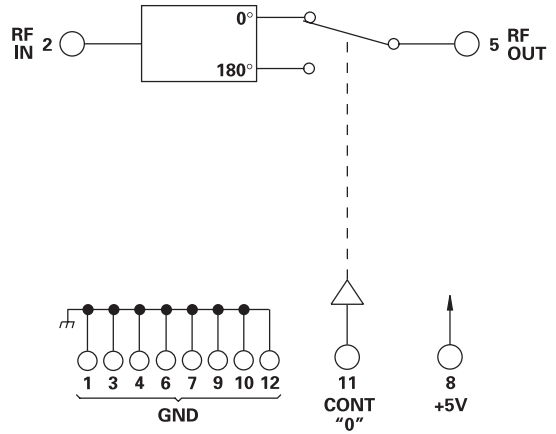
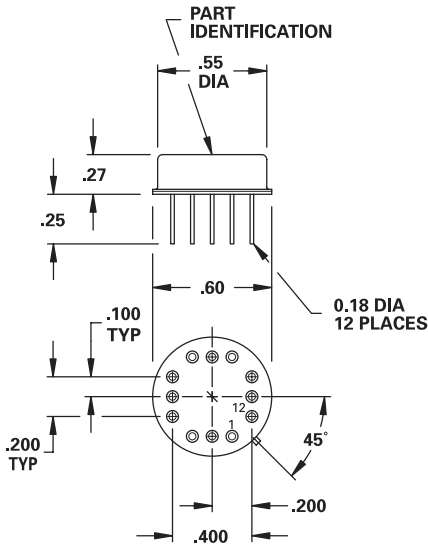
**MODEL NUMBER  
DPB0938**

**GaAs Bi-Phase Modulator**

**FEATURES**

- 10-500 MHz
- ±1 Deg. Phase Accuracy
- 0.3 mA, +5 VDC
- 1.0 dB Insertion Loss
- 35 nSec Transition Time
- 50 nSec Switching Time
- 22 mV Transients
- TTL Control
- TO-8 Package

**BPM**



**GUARANTEED PERFORMANCE**

Parameter	Min	Typ	Max	Units	Conditions
Operating Frequency	10		500	MHz	
DC Current		0.3	2	mA	At +5 VDC Supply
Control Type		TTL			1 Line Logic "1" = Phase Reversal
Control Current		0	±20	µA	V <sub>IH</sub> = +3.0 V
		0	±20	µA	V <sub>IL</sub> = +0.6 V
Insertion Loss		1.0	1.5	dB	10 - 100 MHz
		1.8	2.5	dB	100 - 500 MHz
Phase		180		DEG	
		±1.0	±3.0	DEG	
VSWR		1.25/1	1.4/1		
Impedance		50		OHMS	
Switching Speed		50	70	nSec	50% TTL to 90% / 10% RF
Transition (Rise/Fall) Time		35	50	nSec	90% / 10% or 10% / 90% RF
Switching (Video) Transients		22	50	mV	Peak Value
Intercept Points		2nd	+80	dBm	70 MHz / 50 MHz
		3rd	+51	dBm	35 MHz / 50 MHz
RF Power		Operate	+17	dBm	0.1 dB Compression
		No Damage	+23	dBm	
Operating Temperature	-55	+25	+85	°C	TA

