



Biphase Modulators

700 – 2000 MHz

PM-125/126/127

Features

- Variety of Drivers
- Amplitude Balance: .1dB Typ
- Hermetic TO-8 Package

Guaranteed Specifications¹ (From -55°C to +85°C)

Frequency Range	700 – 2000 MHz	
Insertion Loss	1000 – 1500 MHz	4.0 dB Max
	700 – 2000 MHz	4.5 dB Max
VSWR	3.5:1 Max	
Amplitude Balance	0.3 dB Max	
Phase Deviation	3° Max	

Operating Characteristics

Impedance	50 Ohms Nominal
RF Input Level	
Operating	-3 dBm Max
Non-Destruct	+17 dBm Max

Carrier Suppression (1000 MHz RF, 1MHz Modulation)	35 dB Typ
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Control Input	
PM-125	
Logic 1	+10 mA Drive Current
Logic 0	-10 mA Drive Current

PM-126	
Logic 1	ECL High
Logic 0	ECL Low
PM-127 (LS TTL)	
Logic 1	TTL High
Logic 0	TTL Low

Bias Power	
PM-126	-4.7 to -6.2 VDC @ 50 mA Max (260 mW Typ)
PM-127	+5.0 VDC ± 5% @ 30 mA Max (125 mW Typ)

Package Type	PM-126	TO-8-2
	PM-125, 127	TO-8-4

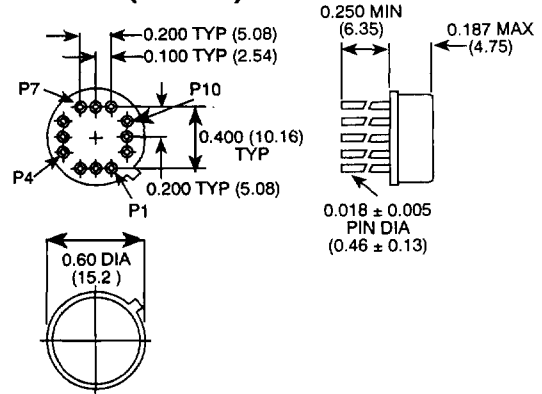
Environmental
See Appendix for MIL-STD-883 screening option

1. All specifications apply with 50 ohm and load impedance and inputs to -3 dBm.

Ordering Information

Part No.	Package
PM-125 PIN	Pin, Current Driver
PM-126 PIN	Pin, ECL Driver
PM-127 PIN	Pin, TTL Driver

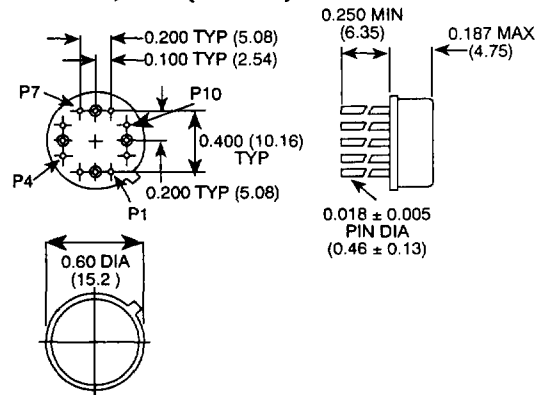
PM-126 (TO-8-2)



Bottom of Case is AC Ground
Dimensions in () are in mm.

Unless Otherwise Noted: .xxx = ± 0.010 (.xx = ± 0.25)
.xx = ± 0.02 (.x = ± 0.5)

PM-126, 127 (TO-8-4)



Bottom of Case is AC Ground
Dimensions in () are in mm.

Unless Otherwise Noted: .xxx = ± 0.010 (.xx = ± 0.25)
.xx = ± 0.02 (.x = ± 0.5)

Truth Table

PHASE STATE	LOGIC STATE	
	D1	D2
0 Deg.	1	0
180 Deg.	0	1

Specifications Subject to Change Without Notice

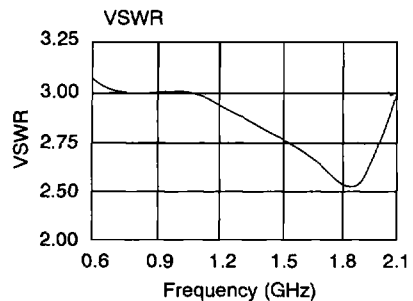
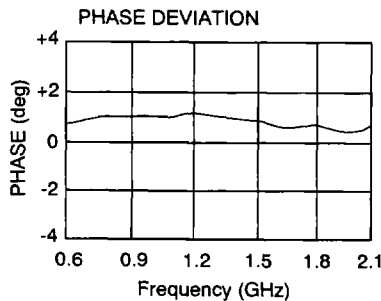
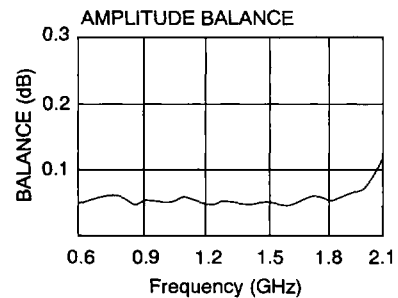
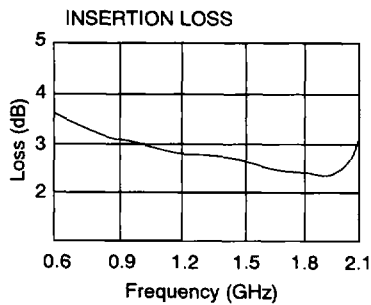
Pin Configurations

PM 125 Pin No.	Description
1	GND
2	RF IN
3	GND
4	GND
5	RF OUT
6	GND
7	GND
8	D2
9	GND
10	GND
11	D1
12	GND

PM 126 Pin No.	Description
1	GND
2	RF IN
3	GND
4	GND
5	RF OUT
6	GND
7	DC
8	D2
9	GND
10	GND
11	D1
12	GND

PM 127 Pin No.	Description
1	GND
2	RF IN
3	GND
4	GND
5	RF OUT
6	GND
7	GND
8	DC
9	GND
10	GND
11	D1
12	GND

Typical Performance



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