

# OCTAVE AND MULTI-OCTAVE DETECTORS, VIDEO

0.2-18 GHz

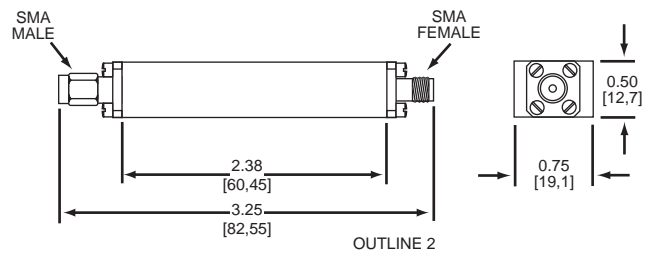
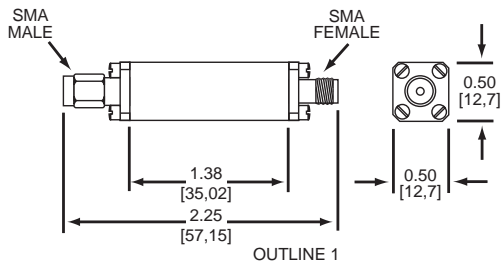
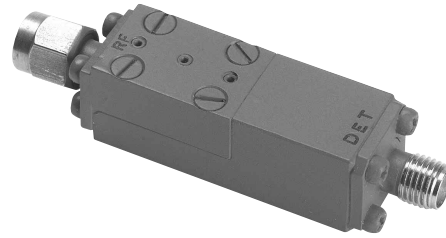
# SERIES PB, PT

## GENERAL INFORMATION

Series PB and PT miniature Detectors achieve the input impedance match without the use of resistive elements, which assures excellent sensitivity. This unique design also results in low VSWR and low video ripple. The units are supplied with either Schottky diodes (PT Series) or back diodes (PB Series).

## GENERAL SPECIFICATIONS

<b>Frequency Range:</b>	0.20 to 18.0 GHz
<b>RF Impedance:</b>	50 OHMS.
<b>Burnout Power:</b>	Series PT; 50 mW CW, 5 W Peak Series PB; 10 mW CW, 1.0 W Peak
<b>Temperature Information:</b>	Operating temperature from -55°C to +85C
<b>Connectors:</b>	SMA standard



## ELECTRICAL SPECIFICATIONS

Model No.	Frequency Range GHz	Tangential Sensitivity @2 Mhz Video Bandwidth -dBm	Output Voltage Flatness vs. Frequency dB	Maximum VSWR	Sensitivity mV/mW	Outline
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### OCTAVE MODELS

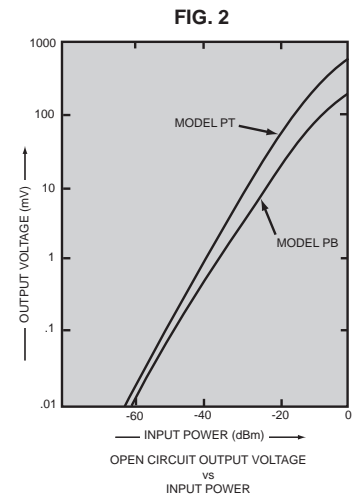
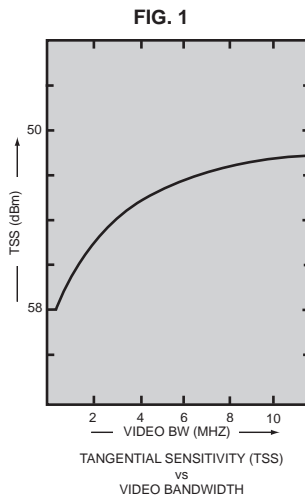
PB-3N	0.2-0.4	52	1.75	±0.60	1000	1
PB-7Q	0.5-1.0	53	1.40	±0.50	800	2
PB-8N	1.0-2.0	52	1.80	±0.60	800	1
PB-8Q	1.0-2.0	53	1.50	±0.50	800	2
PT-22A	1.0-2.0	56	2.20	±0.60	2000	1
PB-27N	1.5-3.0	52	1.80	±0.60	600	1
PB-34N	2.0-4.0	50	1.80	±0.60	600	1
PB-45N	2.6-5.2	50	2.00	±0.70	600	1
PB-48N	4.0-8.0	50	2.00	±0.80	600	1
PT-49A	4.0-8.0	54	2.50	±0.80	1800	1
PB-54N	7.0-12.4	50	2.00	±1.00	400	1
PT-56A	7.0-12.4	54	2.50	±1.00	1700	1
PB-58N	8.0-16.0	48	2.50	±1.25	300	1
PT-59A	8.0-16.0	53	3.00	±1.25	1500	1
PB-62N	12.0-18.0	48	2.20	±1.25	300	1

### MULTI-OCTAVE MODEL

PB-518	0.5-18.0	46	1.6	±2.0	300	1
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### Notes:

- Models with prefix PB use either zero bias, Schottky (back) diodes and require no bias. Models with prefix PT use Schottky diodes and require 20 to 60 microamps bias.
- Diodes are replaceable.
- All units have DC returns.
- Output voltages are negative.
- Fig. 1 shows the relationship of tangential sensitivity versus video bandwidth.
- Fig. 2 illustrates the output voltage versus input power.



KEY: Inches[Millimeters] .XX ±.03 .XXX ±.010 [.X ±0.8 .XX ±0.25]