



### SPECIFICATIONS

| MODEL       | FREQUENCY RANGE   | FREQUENCY RESPONSE                         | MAXIMUM VSWR                                      | OUTPUT CONNECTOR | DIMENSIONS               |
|-------------|-------------------|--|---|------------------|--------------------------|
| <b>109A</b> | 10 MHz - 18.5 GHz | ±0.3 dB to 12.4 GHz<br>±0.6 dB to 18.5 GHz | 1.15 to 4 GHz<br>1.3 to 15 GHz<br>1.4 to 18.5 GHz | SMA Female       | 2.24 in. x 0.83 in. dia. |
| <b>109B</b> | 10 MHz - 18.5 GHz | ±0.3 dB to 12.4 GHz<br>±0.6 dB to 18.5 GHz | 1.15 to 4 GHz<br>1.3 to 15 GHz<br>1.4 to 18.5 GHz | BNC Female       | 2.51 in. x 0.83 in. dia. |
| <b>109S</b> | 10 MHz - 18.5 GHz | ±0.3 dB to 12.4 GHz<br>±0.6 dB to 18.5 GHz | 1.15 to 4 GHz<br>1.3 to 15 GHz<br>1.4 to 18.5 GHz | SMC Jack         | 2.33 in. x 0.83 in. dia. |

**LOW LEVEL SENSITIVITY**

0.5 mV/μW

**OUTPUT CAPACITANCE**

30 pF

**MAXIMUM INPUT**

100 mW

**OPERATING TEMPERATURE**

-54° to +100° C

**OUTPUT POLARITY**

Negative

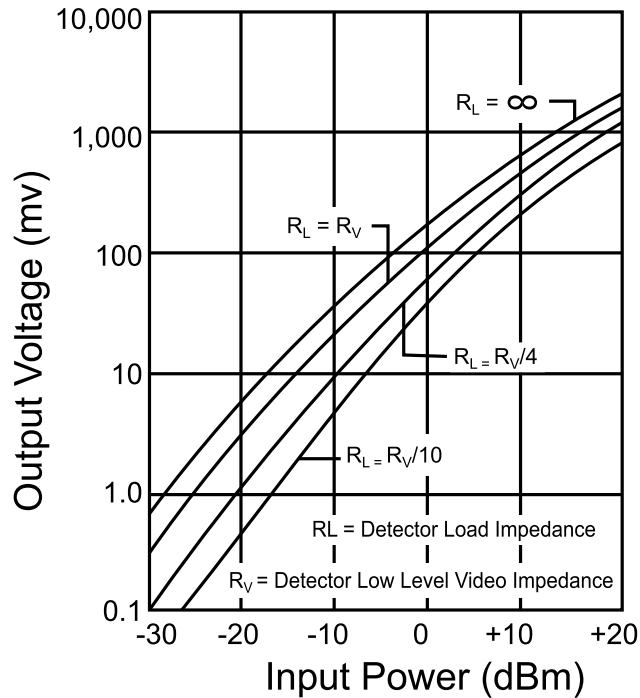
For positive output, add "P" to end of Model Number.

**INPUT CONNECTORS**

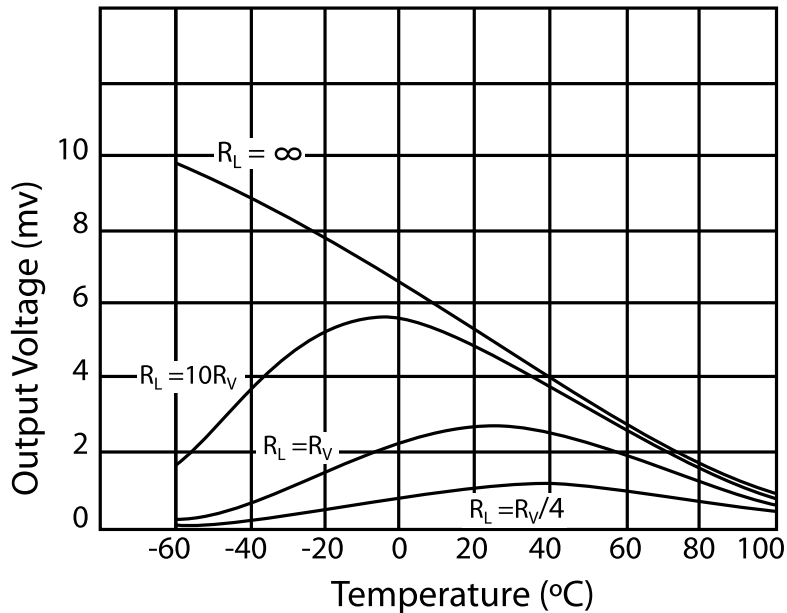
N Male

# ZERO BIAS SCHOTTKY DETECTORS

## TYPICAL OUTPUT VOLTAGE vs. INPUT POWER CURVES FOR VARIOUS $R_L/R_V$ RATIOS at $T_a=20^\circ\text{C}$



## TYPICAL LOW LEVEL ( $P_{in} \leq -20$ dBm) OUTPUT RESPONSE vs. TEMPERATURE CURVES FOR VARIOUS $R_L/R_V$ RATIOS



Curves are normalized to  $R_L = \infty$  and  $T_a = 20^\circ\text{C}$ ,  $R_V$  corresponds to the load that drops the open circuit output voltage in half (3dB) at  $20^\circ\text{C}$ .