



# KRYTAR®

## PLANAR DOPED BARRIER DETECTORS

100 MHz-20 GHz, 100 MHz-26.5 GHz,  
100 MHz-40 GHz, AND 100 MHz-50 GHz



### SPECIFICATIONS

MODEL	FREQUENCY RANGE	FREQUENCY RESPONSE	MAXIMUM VSWR	OUTPUT CONNECTOR	DIMENSIONS
701A	100 MHz - 20 GHz	±0.3 dB	1.3	SMA Female	1.57 in. x 0.4 in. dia.
701B	100 MHz - 20 GHz	±0.3 dB	1.3	BNC Female	1.85 in. x 0.4 in. dia.
701S	100 MHz - 20 GHz	±0.3 dB	1.3	SMC Jack	1.45 in. x 0.4 in. dia.
702A	100 MHz - 26.5 GHz	±0.3 dB to 20 GHz ±0.6 dB to 26.5 GHz	1.3 to 20 GHz 1.4 to 26.5 GHz	SMA Female	1.57 in. x 0.4 in. dia.
702B	100 MHz - 26.5 GHz	±0.3 dB to 20 GHz ±0.6 dB to 26.5 GHz	1.3 to 20 GHz 1.4 to 26.5 GHz	BNC Female	1.85 in. x 0.4 in. dia.
702S	100 MHz - 26.5 GHz	±0.3 dB to 20 GHz ±0.6 dB to 26.5 GHz	1.3 to 20 GHz 1.4 to 26.5 GHz	SMC Jack	1.45 in. x 0.4 in. dia.
703A 703AK	100 MHz - 40 GHz	±0.3 dB to 20 GHz ±0.6 dB to 26.5 GHz ±1.0 dB to 40 GHz	1.3 to 20 GHz 1.4 to 26.5 GHz 1.7 to 40 GHz	SMA Female	1.57 in. x 0.4 in. dia.
703B 703BK	100 MHz - 40 GHz	±0.3 dB to 20 GHz ±0.6 dB to 26.5 GHz ±1.0 dB to 40 GHz	1.3 to 20 GHz 1.4 to 26.5 GHz 1.7 to 40 GHz	BNC Female	1.85 in. x 0.4 in. dia.
703S 703SK	100 MHz - 40 GHz	±0.3 dB to 20 GHz ±0.6 dB to 26.5 GHz ±1.0 dB to 40 GHz	1.3 to 20 GHz 1.4 to 26.5 GHz 1.7 to 40 GHz	SMC Jack	1.45 in. x 0.4 in. dia.
704A	100 MHz - 50 GHz	±0.3 dB to 20 GHz ±0.6 dB to 26.5 GHz ±1.0 dB to 40 GHz ±3.0 dB to 50 GHz	1.3 to 20 GHz 1.4 to 26.5 GHz 1.7 to 40GHz 2.8 to 50 GHz	SMA Female	1.57 in. x 0.4 in. dia.
704B	100 MHz - 50 GHz	±0.3 dB to 20 GHz ±0.6 dB to 26.5 GHz ±1.0 dB to 40 GHz ±3.0 dB to 50 GHz	1.3 to 20 GHz 1.4 to 26.5 GHz 1.7 to 40GHz 2.8 to 50 GHz	BNC Female	1.85 in. x 0.4 in. dia.
704S	100 MHz - 50 GHz	±0.3 dB to 20 GHz ±0.6 dB to 26.5 GHz ±1.0 dB to 40 GHz ±3.0 dB to 50 GHz	1.3 to 20 GHz 1.4 to 26.5 GHz 1.7 to 40GHz 2.8 to 50 GHz	SMC Female	1.45 in. x 0.4 in. dia.

**LOW LEVEL SENSITIVITY**

0.4 mV/μW

**VIDEO IMPEDANCE**

0.8 - 7.5 KΩ

**OUTPUT CAPACITANCE**

3.0 pF

**MAXIMUM INPUT**

200 mW

**OPERATING TEMPERATURE**

-54° to +100° C

**OUTPUT POLARITY**

Negative

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

**INPUT CONNECTOR**

Models 701A, 701B, 701S, 702A, 702B, 702S 3.5 mm Male

Models 703A, 703B, 703S, 704A, 704B, 704S 2.4 mm Male

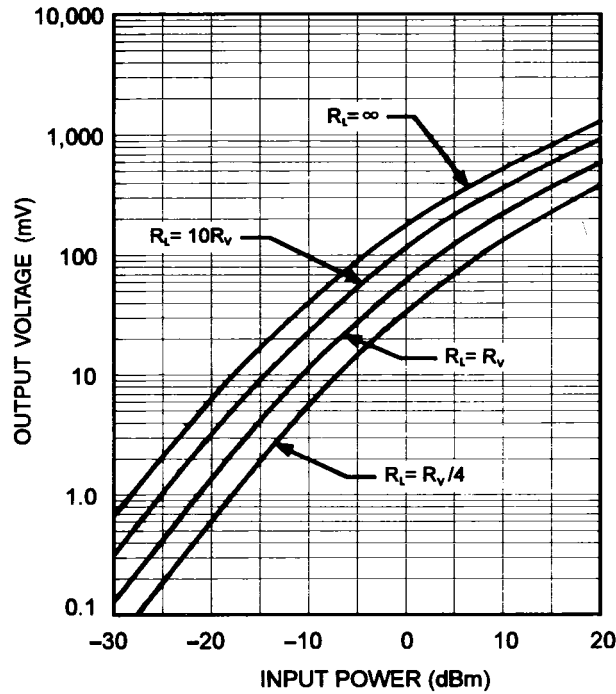
Models 703AK, 703BK, 703SK 2.92 mm Male



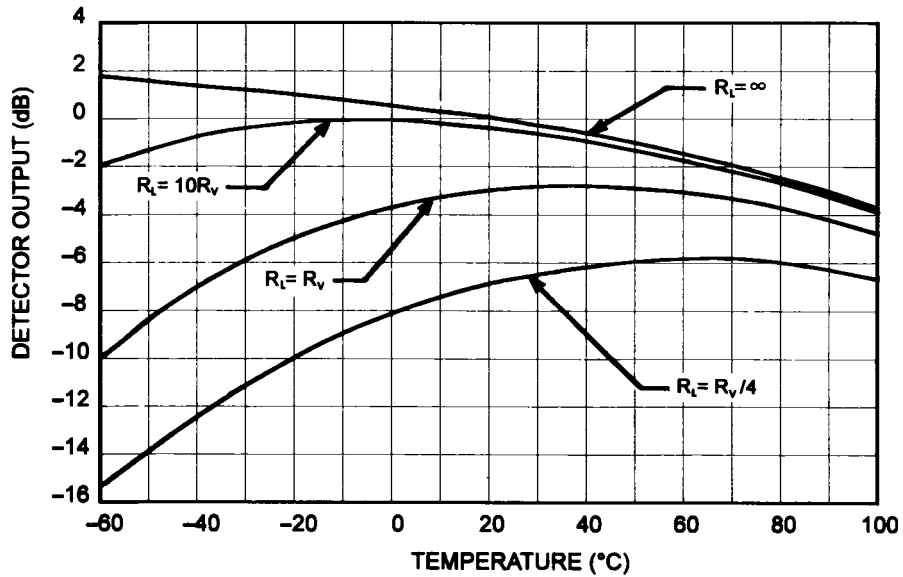
1288 Anvilwood Ave. • Sunnyvale, CA 94089 • (408) 734-5999 • FAX: (408) 734-3017  
Toll Free 1 (877) 734-5999 • www.krytar.com

# PLANAR DOPED BARRIER 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  $20^\circ\text{C}$ .