### **MICROWAVE DETECTORS**

70, 75 Series 100 kHz to 50 GHz

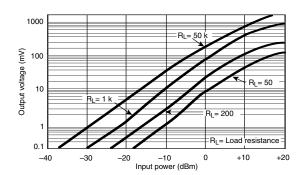




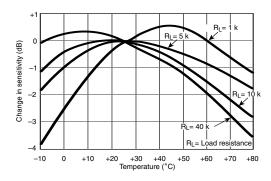
Within the 70 or 75 Series product lines, you will find a model that matches your needs for instrumentation, system, or OEM applications. By using the latest design and microelectronics production technologies, Anritsu low-barrier Schottky-diode detectors outperform others and offer significant cost savings. Input connector types include Type N, and K Connector® (compatible with SMA and 3.5 mm), and V Connector® (compatible with 2.4 mm). In addition to frequency coverage and price, these detectors are distinguished by their low SWR, flat frequency response, and close output-voltage tracking over a wide dynamic range.

#### **Features**

- Broadband coverage, 10 MHz to 50 GHz with a Single Detector
- K Connector® compatible with SMA and 3.5 mm
- V Connector® compatible with 2.4 mm
- Lowest SWR: 1.33 to 20 GHz, 1.5 to 40 GHz
- Flat Response: ±0.5 dB to 20 GHz ±1.5 dB to 40 GHz
- Best Value for Instrumentation, system, and OEM applications
- Low price and availability from stock
- Standard output polarity is negative
- Positive polarity is available as a special



Typical sensitivity



Typical sensitivity change

## **MICROWAVE DETECTORS**

70, 75 Series 100 kHz to 50 GHz

## **Specifications**

Model	Frequency range	Flatness (dB)	Connectors		Impedance	SWR (Maximum)	Low level sensitivity at	High level sensitivity at	Input	Output
			ln	Out	(Ω)	SWK (Maximum)	-30 dBm (mV/µW)	+13 dBm (Volts, Min.)	maximum (mW)	capacitance (pF)
70KA50	0.01 to 20 GHz	±0.6	K(m)	SMC(f)	50	1.33	0.6	1	100	30
70KC50	0.01 to 40 GHz	±0.5 to 20 GHz ±1.0 to 26.5 GHz ±1.5 to 40 GHz	K(m)	SMC(f)	50	1.33 to 20 GHz 1.50 to 26.5 GHz 1.90 to 40 GHz	0.4	1	100	30
75N50B	0.01 to 18 GHz	±0.3 to 12.4 GHz ±0.6 to 18 GHz	N(m)	BNC(f)	50	1.15 to 4.5 GHz 1.30 to 15 GHz 1.39 to 18 GHz	0.35	1	100	30
75KC50	0.01 to 40 GHz	±0.5 to 20 GHz ±1.0 to 26.5 GHz ±1.5 to 40 GHz	K(m)	BNC(f)	50	1.33 to 20 GHz 1.50 to 26.5 GHz 1.90 to 40 GHz	0.4	1	100	30
75VA50	0.01 to 50 GHz	±0.5 to 20 GHz ±1.0 to 26.5 GHz ±1.5 to 40 GHz ±3 to 50 GHz	V(m)	BNC(f)	50	1.33 to 20 GHz 1.50 to 26.5 GHz 1.90 to 40 GHz 2.1 to 50 GHz	0.4	1	100	30

### **Dimensions**

Model	Dimensions L(cm) x dia(cm)
70KA50	4.6 x 1.0
70KC50	4.6 x 1.0
75N50B	6.4 x 1.8
75KC50	4.6 x 1.0
75VA50	4.6 x 1.0

# **Ordering information**

Please specify model/order number, name, and quantity when ordering.

Model/Order No.	Name				
	Microwave Detector				
70KA50	10 MHz to 20 GHz, K(m) input, SMC(f) output, 50 $\Omega$				
70KC50	10 MHz to 40 GHz, K(m) input, SMC(f) output, 50 $\Omega$				
75KC50	10 MHz to 40 GHz, K(m) input, BNC(f) output, 50 $\Omega$				
75N50B	10 MHz to 18 GHz, N(m) input, BNC(f) output, 50 $\Omega$				
75VA50	10 MHz to 50 GHz, V(m) input, BNC(f) output, 50 $\Omega$				
	Options				
Option 2 (75KC50)	Matching frequency response of two detectors				
Option 3 (75KC50)	Matching frequency response of three detectors				

<sup>\*</sup> Upper frequency limit (GHz):  $\leq$ 8,  $\leq$ 12.4,  $\leq$ 18,  $\leq$ 26.5,  $\leq$ 40

<sup>\*\*</sup> Frequency response tracking (dB):  $\pm 0.2$ ,  $\pm 0.3$ ,  $\pm 0.6$ ,  $\pm 0.8$ ,  $\pm 1.2$