

# Miniature Ultra-Flat Schottky Detectors



RLC Electronics' miniature ultra-flat detectors utilize a zero-bias Schottky design. The microwave power is coupled directly to the extremely small components reducing package parasitics and transition mismatches. This design results in a very low

VSWR and a flat, smooth output over a wide bandwidth. Options available include negative or positive output, a choice of three output connectors and operation to 26.5 GHz.

## Specifications

CR<sup>-1-2-3</sup>

<b>Frequency Range</b>	.01 - 18.5 GHz	.01 - 26.5 GHz (Option - 26)
<b>Frequency Response (Max.)</b>		
.01 - 18.5 GHz	± 0.5 dB	± 0.5 dB
18.5 - 26.5 GHz	—	± 1 dB
<b>VSWR (Max.)</b>		
.01 - 12.4 GHz	1.25	1.25
.01 - 18.5 GHz	1.50	1.50
.01 - 18.5 GHz	—	2.00
<b>Typical Sensitivity</b> (Pin < -30 dBm)	0.5 mV/μW	0.5 mV/μW

**Input Power:** 100 mW maximum  
(peak or average)

**Video Resistance:** 5000 ohms nominal

**Input Connector Type:** 'SMA' Male

**Temperature Range:** -55°C to +100°C

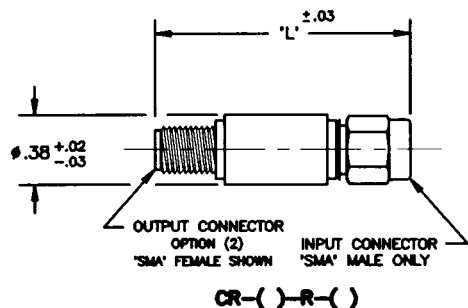
**Bias:** none

To designate the switch desired use:

- (1) 301 for negative output 302 for positive output
- (2) Output connector: R for 'SMA' female B for 'BNC' female S for 'SMC' jack
- (3) 26 for 26.5 GHz option

Example: CR-301-R-26 is a .01 - 26.5 GHz, negative output detector with a 'SMA' female output connector.

## Outline Drawing



OUTPUT CONNECTOR	OPTION (2)	'L'
'SMA' FEMALE	R	1.30
'BNC' FEMALE	B	1.58
'SMC' JACK	S	1.28

Tolerances unless otherwise specified are: .xx ± .02

