

# RF Detectors

MODELS	D151	D152	D153	D171	M151
Frequency Range (MHz)	0.2 to 1000	0.2 to 2000	1.0 to 12,400	0.2 to 1000	0.2 to 1000
Impedance (Ohms)	50	50	50	75	50
VSWR	1.15	1.5	1.2 to 4.5 GHz 1.3 to 7.0 GHz 1.4 to 12.4 GHz	1.15 (>23 dB return loss)	1.5
Max Input	3.0V	3.0V	100 mW	3.0V	3.0V
Output Polarity*	Negative*	Negative*	Negative**	Negative*	Negative*
Frequency Response (dB)	$\pm 0.3$	$\pm 0.5$	$\pm 0.2$ per octave to 8 GHz $\pm 0.5$ overall	$\pm 0.3$	$\pm 0.5$
Connectors RF Input DC Output	Male BNC Female BNC	Male BNC Female BNC	Male N Female BNC	Male BNC Female BNC	Female BNC Female BNC
Dimensions — Diameter : Length:	1.4 cm ( <sup>9</sup> / <sub>16</sub> in.) 5.7 cm (2 <sup>1</sup> / <sub>4</sub> in.)	1.4 cm ( <sup>9</sup> / <sub>16</sub> in.) 5.7 cm (2 <sup>1</sup> / <sub>4</sub> in.)	2.1 cm ( <sup>8</sup> / <sub>100</sub> in.) 6.3 cm ( <sup>4</sup> / <sub>100</sub> in.)	1.4 cm ( <sup>9</sup> / <sub>16</sub> in.) 5.7 cm (2 <sup>1</sup> / <sub>4</sub> in.)	1.4 cm ( <sup>9</sup> / <sub>16</sub> in.) 5.7 cm (2 <sup>1</sup> / <sub>4</sub> in.)
PRICE (FOB Beech Grove)	\$88	\$125	\$225	\$90	\$115

\*May be reversed by reversing diode.

\*\*Order D153-P for positive output.

## Low VSWR

Series 150 and 170 Detectors are designed for applications requiring low VSWR and flat frequency response across broad operating ranges.

## 50 and 75Ω Units

Models D151 and D152 are 50Ω units with typical VSWRs of 1.2 at

1000 MHz. D151 has a 1000 MHz upper limit and D152 can be operated up to 2 GHz.

Model D171 is a 75Ω detector that operates over the frequency range of 200 kHz to 1000 MHz with a response of  $\pm 0.3$  dB and a return loss of greater than 23 dB. This is accomplished through use of the

Wavetek designed 75Ω BNC connector and associated frequency compensating circuitry.

Model D153 has a frequency range of 1.0 to 12,400 MHz with a VSWR typically less than 1.20.

Model M151 is equipped with female BNC input and output connectors.

