

# Detectors

0.01-18 GHz

## Miniature Flat, Zero-Biased Schottky Detectors

- Broadband Coverage
- Flat Frequency Response
- High Sensitivity
- Field-Replaceable Diode
- Negative or Positive Output Available



### Specifications

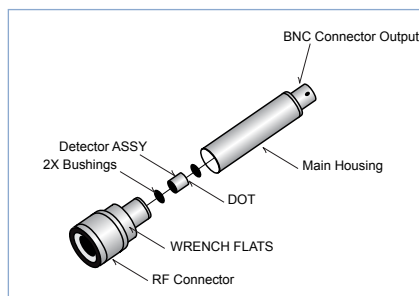
Type N (M) and SMA (M) to BNC (F), 0.01 to 18 GHz

FREQUENCY RANGE (GHz)	MODEL	FLATNESS (dB)	SENSITIVITY* (mV/μW)	VSWR (max)	INPUT POWER (mW max)	POLARITY	CONNECTORS INPUT	CONNECTORS OUTPUT
0.01-18	503A	±0.6	0.5	<1.6	100	Neg.	Type N-M	BNC-F
	503A-03	±0.6	0.5	<1.6	100	Pos.	Type N-M	BNC-F
	4503A	±0.6	0.5	<1.6	100	Neg.	SMA-M	BNC-F
	4503A-03	±0.6	0.5	<1.6	100	Pos.	SMA-M	BNC-F

\* Referenced to -20 dBm maximum at 25°C

REPLACEMENT DIODES	
Detector	Replacement Diode
503A, 4503A	4829
503A-03, 4503A-03	4829-03

NOTE: Not to be used for 4506 series.

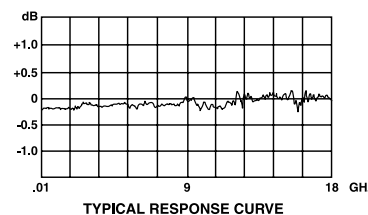
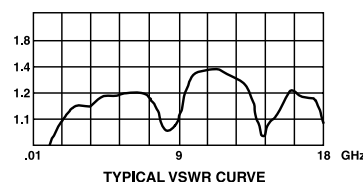
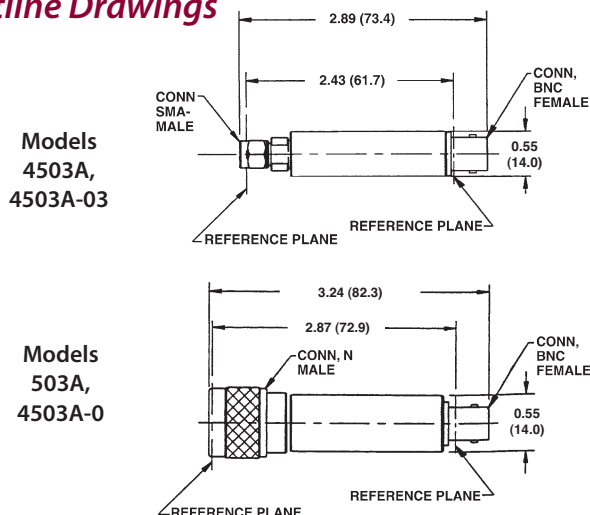
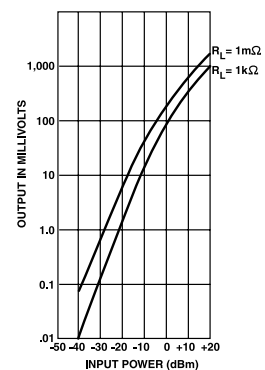


#### Field Diode Replacement Procedure

Using approved ESD guidelines:

1. Hold Detector by main housing (side with BNC connector). Unscrew RF Input connector by applying a wrench to flats provided.
2. Remove detector assembly.
3. Insert bushings into each assembly.
4. Insert replacement diode into RF connector side – dot should be facing out.
5. Reassemble the connector and hand tighten.

### Outline Drawings

TYPICAL DETECTOR SENSITIVITY  
MODELS 503A, 4503A

Dimensions in inches (mm in parentheses), unless otherwise specified.