



# ZERO-BIAS SCHOTTKY DIODE DETECTORS

100 KHz - 50 GHz

## FEATURES

- No Bias Required
  - Matched Input for Excellent VSWR\*\*
  - Extremely Flat Frequency Response\*\*
  - Very High Sensitivity (DZ Series)
- \*\* (DZR & DZM Series)



## APPLICATIONS

- Precision Test Equipment
- Transmitter Monitoring
- Power and Signal Monitoring
- Radar or Missile Guidance Systems
- Lab Testing

## ENVIRONMENTAL RATINGS

Max Input Power..... 200mW CW (DZR & DZM Series)  
 100mW (DZ Series)  
 Temperature Range..... -55°C to +100°C (DZR Series)  
 -45°C to +85°C (DZM & DZ Series)  
 Shock..... 50G, 11 msec  
 Vibration..... 20G, 100 to 2000 Hz

## Specifications: (@ +25°C)

MODEL <sup>1,2</sup>	FREQUENCY RANGE	MAXIMUM VSWR	MAXIMUM FLATNESS (± dB)	LOW LEVEL SENSITIVITY (mV / μW)	CONNECTOR		SIZE (INCHES)		OUTLINE
					INPUT	OUTPUT	LENGTH	DIA	
DZR124AA	10 MHz – 12.4 GHz	1.25:1	0.3	0.5	SMA (M)	SMA (F)	1.05	0.32	A
DZR124AC					SMA (M)	SMC (M)	1.47	0.32	AC2
DZR185AA	10 MHz – 18.5 GHz	1.25:1	0.5	0.5	SMA (M)	SMA (F)	1.05	0.32	A
DZR185AC					SMA (M)	SMC (M)	1.47	0.32	AC2
DZR265AA	10 MHz – 26.5 GHz	1.3:1 (to 18.5 GHz)	0.5 (to 18.5 GHz)	0.5	SMA (M)	SMA (F)	1.05	0.32	A
DZR265AC		2.0:1 (to 26.5 GHz)	1.0 (to 26.5 GHz)		SMA (M)	SMC (M)	1.47	0.32	AC2
DZM020BB	100 KHz - 2.0 GHz	1.3:1	0.1 (per 100 KHz) 0.3 (overall)	0.5	BNC (M)	BNC (F)	2.48	0.68	BB <sup>3</sup>
DZM040AA	100 KHz - 4.0 GHz				SMA (M)	SMA (F)	1.05	0.32	A
DZM040BB					BNC (M)	BNC (F)	2.48	0.68	BB <sup>3</sup>
DZM124AA	10 MHz – 12.4 GHz	1.2:1 (to 4.5 GHz)	0.2 (per octave) 0.5 (overall)	0.5	SMA (M)	SMA (F)	1.05	0.32	A
DZM124AB		1.3:1 (to 7 GHz)			SMA (M)	BNC (F)	2.50	0.56	AB <sup>3</sup>
DZM124NB		1.4:1 (to 12.4 GHz)			Type N (M)	BNC (F)	2.46	0.75	NB <sup>3</sup>
DZM185AA	10 MHz – 18.5 GHz	1.2:1 (to 4 GHz) 1.5:1 (to 18.5 GHz)	0.2 (per octave to 8 GHz) 0.3 (for 10 MHz to 8 GHz) 0.5 (overall)	0.5	SMA (M)	SMA (F)	1.05	0.32	A
DZM185AB					SMA (M)	BNC (F)	2.50	0.56	AB1 <sup>3</sup>
DZM185AB2					SMA (M)	BNC (F)	1.89	0.39	AB2 <sup>3</sup>
DZM185AC					SMA (M)	SMC (M)	1.20	0.32	AC1
DZM185NB					Type N (M)	BNC (F)	2.46	0.75	NB <sup>3</sup>
DZM1857B					APC-7	BNC (F)	2.59	0.75	7B <sup>3</sup>

Note 1: Negative output polarity standard. Add "P" to end of model number for positive output polarity.  
 Note 2: Matched pairs available at extra charge for frequency response within +/- 0.3 dB below 18.5 GHz and +/- 0.5 dB from 18.5 to 26.5 GHz. Add "M" to end of model number.  
 Note 3: Consult factory for more details.



# ZERO-BIAS SCHOTTKY DIODE DETECTORS

100 KHz - 50 GHz

## Specifications: (@ +25°C)

MODEL <sup>1,2</sup>	FREQUENCY RANGE	MAXIMUM VSWR	MAXIMUM FLATNESS (± dB)	LOW LEVEL SENSITIVITY (mV / μW)	CONNECTOR		SIZE (INCHES)		OUTLINE
					INPUT	OUTPUT	LENGTH	DIA	
DZM265AA	10 MHz-26.5 GHz	1.2:1 (to 4 GHz) 1.5:1 (to 18 GHz) 1.8:1 (to 26.5 GHz)	0.2 (per octave to 8 GHz) 0.5 (for 10 MHz to 18 GHz) 1.0 (overall)	0.5	SMA (M)	SMA (F)	1.05	0.32	A
DZM265AB					SMA (M)	BNC (F)	1.89	0.39	AB2 <sup>3</sup>
DZM265AC					SMA (M)	SMC (M)	1.20	0.32	AC1
DZM2653B					APC3.5 (M)	BNC (F)	1.89	0.39	3B <sup>3</sup>
DZM2653C					APC3.5 (M)	SMC (M)	1.70	0.38	3C <sup>3</sup>
DZR400KA	10 MHz – 40 GHz	1.3:1 (to 18 GHz) 1.8:1 (to 40 GHz)	0.3 (to 18 GHz) 0.6 (to 26 GHz) 1.0 (to 40 GHz)	0.4	K* (M) (2.9mm)	SMA (F)	1.30	0.32	C1
DZR400KB					K* (M) (2.9mm)	BNC (F)	1.89	0.39	KB <sup>3</sup>
DZR400KC					K* (M) (2.9mm)	SMC (M)	1.35	0.32	KC <sup>3</sup>
DZR50024A	10 MHz – 50 GHz	1.3:1 (to 18 GHz) 1.6:1 (to 26 GHz) 1.8:1 (to 40 GHz) 2.0:1 (to 50 GHz)	0.3 (to 18 GHz) 0.6 (to 26 GHz) 0.8 (to 40 GHz) 1.0 (to 50 GHz)	0.5	2.4mm (M)	SMA (F)	1.32	0.32	24A <sup>3</sup>
DZR50024B					2.4mm (M)	BNC (F)	1.91	0.39	24B <sup>3</sup>
DZR50024C					2.4mm (M)	SMC (M)	1.36	0.32	24C <sup>3</sup>
DZ1018	1 GHz – 18.0 GHz	8.0:1 (Typical)	1.0 (Typical)	1.8	SMA (M)	SMA (F)	1.16	0.32	B
DZ1026	1 GHz – 26.0 GHz	8.0:1 (Typical)	1.5 (Typical)	1.6	SMA (M)	SMA (F)	1.16	0.32	B

\*K Connector Trademark of Wiltron Co.

Note 1: Negative output polarity standard. Add "P" to end of model number for positive output polarity

Note 2: Matched pairs available at extra charge for frequency response within +/- 0.3 dB below 18.5 GHz and +/- 0.5 dB from 18.5 to 26.5 GHz. Add "M" to end of model number.

Note 3: Consult factory for more details.

For Package Outlines see Outline Drawings Page