Coaxial Detectors

100 kHz to 26.5 GHz - Zero Bias Schottky

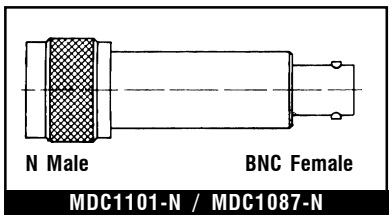
Features

- Broadband (0.01 to 26.5 GHz)
- Excellent flatness (±0.5 dB to 26.5 GHz)
- Low VSWR due to matched input
- Very high sensitivity
- No bias required
- Metallurgically bonded diodes
- High burnout protection
- Choice of 3.5mm, 7mm (APC-7), N, K, BNC, or SMA input connectors
- Positive or Negative polarity available
- Matched pairs available
- Delivery from stock

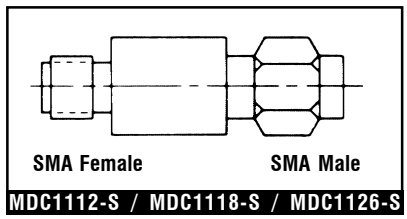
The MIDISCO Zero Bias Schottky broadband coaxial detectors, with their superior broadband flatness, low VSWR, ruggedness and burnout protection, relative to point-contact models, are excellent for use in broadband EW system applications and microwave instrumentation. Since they do not require DC bias and can be used with common oscilloscopes, their ease of use and broadband performance make them very useful in laboratory measurements.

The various series include choices of 3.5mm, 7 mm (APC-7), N, K, SMA, or BNC input connectors and BNC, SMA, or SMC output connectors. Matched pairs are available (suffix -M to part number) with a frequency response less than ±0.3 dB to 18.5 GHz and ±0.5 dB from 18.5 to 26.5 GHz.

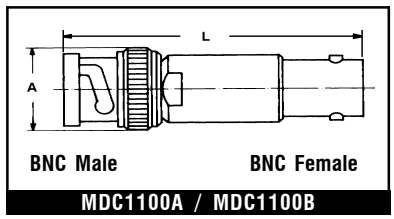
Biased detectors are also available. Consult factory.



MDC1101-N / MDC1087-N



MDC1112-S / MDC1118-S / MDC1126-S



MDC1100A / MDC1100B

SPECIFICATIONS †

Frequency Range	Model Number	Connectors		Mech. Dimensions		VSWR	Frequency Response		Low Level Sensitivity	Input Power
		Input	Output	Length	Diameter		Octave	Broadband		
100kHz to 2 GHz	MDC1100A	BNC Male	BNC Female	2.50 in. (64 mm)	0.51in. (13mm)	1.3:1 max.	±0.1dB (per 100kHz)	±0.3 dB	0.50mV/μW	Maximum operating 200mW; Short duration (less than 1 minute) 1 watt (typical)
100kHz to 4 GHz	MDC1100B									
0.01 to 12.4 GHz	MDC1101-N	Type N Male	BNC Female	2.46 in. (62.5 mm)	0.75 in. (19 mm)	1.20:1 max. (to 4.5 GHz) 1.30:1 max. (to 7 GHz) 1.40:1 max. (to 12.4 GHz)	±0.2 dB	±0.5 dB (to 12.4 GHz)	0.40mV/μW	
	MDC1101-S	SMA Male	BNC Female	2.50 in. (64 mm)	0.56 in. (14 mm)					
	MDC1112-S	SMA Male	SMA Female	1.15 in. (29 mm)	0.34 in. (8.6 mm)	1.25:1 max.			0.50mV/μW	
	MDC1112-C	SMA Male	SMC Male	1.50 in. (38 mm)	0.34 in. (8.6 mm)					
0.01 to 18 GHz	MDC1087-7	APC-7	BNC Female	2.59 in. (65.8 mm)	0.75 in. (19 mm)	1.2:1 max. (to 4GHz) 1.4:1 max. (to 18GHz)	±0.2dB (to 8GHz)	±0.3dB (to 8 GHz) ±0.5dB (to 18 GHz)	>0.42mV/μW	
	MDC1087-N	Type N Male	BNC Female	2.46 in. (62.5 mm)	0.75 in. (19 mm)					
	MDC1087-S	SMA Male	BNC Female	2.50 in. (64 mm)	0.56 in. (14 mm)	1.2:1 max. (to 4GHz) 1.5:1 max. (to 18GHz)				
0.01 to 18 GHz	MDC1118-S	SMA Male	SMA Female	1.15in. (29 mm)	0.34 in. (8.6 mm)	1.25:1 max.	±0.2 dB	±0.3 dB (to 8 GHz) ±0.5 dB (to 18 GHz)	0.50 mV/μW	
	MDC1118-C	SMA Male	SMC Male	1.50 in. (38 mm)	0.34 in. (8.6 mm)					
0.01 to 26.5 GHz	MDC1126-S	SMA Male	SMA Female	1.15 in. (29 mm)	0.34 in. (8.6 mm)	1.3:1 max. (to 18.5 GHz) 2:1 max. (to 26.5 GHz)	±0.5 dB (to 18GHz) ±1.0 dB (to 26.5GHz)		0.50 mV/μW	
	MDC1126-C	SMA Male	SMC Male	1.50 in. (38 mm)	0.34 in. (8.6 mm)					
0.01 to 40 GHz	MDC1140-S	K ‡ Male (2.9mm)	SMA Female	1.30 in. (33 mm)	0.32 in. (8.2 mm)	1.3:1 max. (to 18 GHz) 1.6:1 max. (to 26 GHz) 1.8:1 max. (to 40 GHz)	±0.3 dB (to 18 GHz) ±0.6 dB (to 26 GHz) ±1.0 dB (to 40 GHz)		0.40 mV/μW	
	MDC1140-B	K ‡ Male (2.9mm)	BNC Female	1.89 in. (48 mm)	0.39 in. (9.9 mm)					
	MDC1140-C	K ‡ Male (2.9mm)	SMC Male	1.35 in. (34 mm)	0.32 in. (8.2 mm)					
0.01 to 26.5 GHz	MDC1087A-3.5	3.5mm Male	BNC Female	1.85 in. (50 mm)	.40 in. (10.2 mm)	1.3:1 max. (to 20 GHz) 1.4:1 max. (to 26.5 GHz)	±0.3 dB (to 20 GHz)	±0.6 dB (to 26.5 GHz)	0.40 mV/μW	

† *Specifications given for T_A=+25°C*

‡ *K Connector trademark of Wiltron Co.*

Matched pairs are available for frequency response within ±0.3dB to 18.5 GHz and ±0.5dB to 26.5 GHz - add suffix M.

Output Polarity: Negative polarity standard.

For positive polarity models, add "R" suffix to part number.

Example: MDC1087-SR

Dimensions are for reference only and are subject to change

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