

Back Diode Detector With Replaceable Diodes

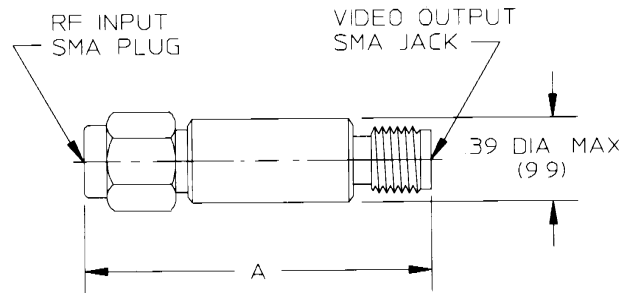
2085 Series

V2.00

Specifications

Bias Current	0
Output Polarity	Negative ⁴
Video Resistance	80 Ohms Nominal ²
Maximum Power	40 mW CW or 3 erg spike (except 2085-6018-00) 2085-6018, 25 mW CW or 2 erg spike
Temperature Stability	±1 dB over operating range of -65°C to +100°C
Tracking	0.5 dB (Matched Pair) per octave band (except 2085-6018-00) 2085-6018-00, 0.8 dB (Matched Pair) per octave band ⁵
Temperature Range	-65°C to +100°C
Finish	Passivated Stainless Steel

Mechanical Outline



Frequency Range (GHz)	Flatness ¹ Typical (± dB)	VSWR ¹ Typical	Open Circuit Voltage Sensitivity ² (mV/mW)		Tangential Sensitivity ³ (-dBm)		Output Capacitance Typical (pF)	Dimension A Inches (mm)	Replacement Diode Part Number	Detector Part Number
			Typ.	Min.	Typ.	Min.				
1.0-18.0	1.5	4.0	500	400	47.0	46.0	12	1.35 (34.3)	9999-4018-00	2085-6010-00
1.0-2.0	0.2	2.5	780	700	53.0	52.0	18	1.35 (34.3)	9999-4018-00	2085-6013-00
2.0-4.0	0.3	1.8	840	750	53.5	52.5	18	1.55 (39.4)	9999-4028-00	2085-6014-00
4.0-8.0	0.4	2.5	610	525	52.0	51.0	12	1.55 (39.4)	9999-4029-00	2085-6015-00
8.0-12.4	0.5	2.0	640	550	52.5	51.5	12	1.55 (39.4)	9999-4030-00	2085-6016-00
12.4-18.0	0.5	2.5	600	500	52.0	51.0	9	1.55 (39.4)	9999-4031-00	2085-6017-00

Typical Extended Band Performance

Frequency Range (GHz)	Flatness ¹ Typical (± dB)	VSWR ¹ Typical	Open Circuit Voltage Sensitivity ² Typical (mV/mW)	Tangential Sensitivity ³ (-dBm)	Output Capacitance Typical (pF)	Detector Part Number
.85-6.0	1.0	3:1	500	50.0	18	2085-6013-00
1.4-5.0	1.0	3:1	500	50.0	18	2085-6014-00
3.9-9.5	1.0	3:1	500	50.0	12	2085-6015-00
6.5-14.0	1.0	3:1	400	49.0	12	2085-6016-00
2.7-18.5	1.0	3:1	400	49.0	9	2085-6017-00

Notes:

- For RF power levels below -20 dBm, and with 1,000 ohm load.
- For RF power levels below -20 dBm.

- With video amplifier of 1 MHz bandwidth, and 2 dB noise figure.
- Consult factory for positive output or matched pairs.

Specifications Subject to Change Without Notice.

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