Back Diode Detector

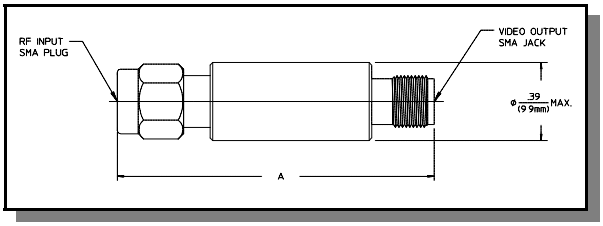
V 3.00

2085 Series

Specifications

Parameter	Specification
Bias Current	0
Output Polarity	Negative [4]
Video Resistance	80 Ohms Nominal [2]
Maximum Power	40 mW CW or 3 erg spike
Temperature Stability	± 1 dB over operating range of –65°C to +100°C
Temperature Range	-65°C to +100°C
Finish	Passivated Stainless Steel

Mechanical Outline Drawing



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

Typical Extended Band Performance

Detector Part Number	Frequency Range (GHz)	Flatness[1] Typical (± dB)	VSWR[1] Typical	Open Circuit Sensitivity[2] (mV/mW) Typical	Tangential Sensitivity[3] (-dBm)	Output Capacitance Typical (pF)
2085-6013-00	0.85 - 6.0	1.0	3:1	500	50.0	18
2085-6014-00	1.4 - 5.0	1.0	3:1	500	50.0	18
2085-6015-00	3.9 - 9.5	1.0	3:1	500	50.0	12
2085-6016-00	6.5 - 14.0	1.0	3:1	400	49.0	12
2085-6017-00	2.7 - 18.5	1.0	3:1	400	49.0	9

1. For RF Power levels below -20 dBm, and with 1,000 ohm load.
2. For RF power levels below -20 dBm.
3. With video amplifier of 1 MHz bandwidth, and 2 dB noise figure.
4. For Positive Output change suffix to -13.