



Microwave Detectors

MODEL NUMBER SYSTEM

DT^Ag^BA^{C1}D^PE

^AType (Table 1)

^BFrequency (Tables 4, 5 or 6)

^CPackage Style (Table 7)

^DPolarity (Table 2)

^EVideo Connector (Table 3)

TABLE 1: TYPE

DT = Tunnel Detector
DS = Schottky Detector
DZ = Zero Bias
Schottky Detector

TABLE 2: VIDEO POLARITY

P = Positive
N = Negative

TABLE 3: VIDEO CONNECTOR

1 = SMA Female
2 = SMB Male
3 = SMC Male
4 = SMA Male (SMA
Female Input)
5 = Module Lead

TABLE 4: TUNNEL DETECTOR SPECIFICATIONS

Code Number	Frequency Range (GHz)	K Factor ¹ (mv/mw) minimum	Flatness (±dB) maximum	VSWR ⁵ (-:1) Typical	Tss ² (dBm) Typical	R.F. Bypass Capacitor	Package Style
0	0.1 to 0.5	800	0.4	4.0	-50	550 pf	D, H, L
1	0.5 to 1.0	1000	0.4	4.5	-50	100 pf	C, K, G
2	1 to 2	800	0.4	4.5	-50	50 pf	C, K, G
3	2 to 4	600	0.4	3.5	-49	30 p	A
4	4 to 8	600	0.4	3.5	-49	30 pf	A
5	8 to 12	550	0.5	4.0	-49	30 pf	A
6	8 to 16	500	0.8	4.5	-48	30 pf	A
7	12 to 18	450	1.0	4.5	-48	30 pf	A
8	2 to 12	550	0.8	4.0	-49	30 pf	A
9	2 to 18	450	1.0	4.5	-48	30 pff	A

TABLE 5: SCHOTTKY DETECTOR SPECIFICATIONS

Code Number	Frequency Range (GHz)	K Factor ¹ (mv/mw) minimum	Flatness (±dB) maximum	Tss ² (dBm) Typical	R.F. Bypass Capacitor	Bias (micro amps)	Package Style
0	0.1 to 0.5	2000	0.5	-54	550 pf	100	D, H, L
1	0.5 to 1.0	2000	0.5	-54	100 pf	100	C, K, G
2	1 to 2	2000	0.5	-53	50 pf	100	C, K, G
3	2 to 4	2000	0.7	-53	30 p	100	A
4	4 to 8	2000	0.7	-53	30 pf	100	A
5	8 to 12	2000	0.8	-52	30 pf	100	A
6	8 to 16	1500	1.0	-52	30 pf	100	A
7	12 to 18	1250	1.0	-51	30 pf	100	A
8	2 to 12	1250	1.2	-52	30 pf	100	A
9	2 to 18	1000	1.5	-51	30 pff	100	A

TABLE 6: ZERO BIAS SCHOTTKY DETECTOR SPECIFICATIONS

Code Number	Frequency Range (GHz)	K Factor ¹ (mv/mw) minimum	Flatness (±dB) maximum	Tss ² (dBm) Typical	R.F. Bypass Capacitor	Package Style
0	0.1 to 0.5	2000	0.5	-54	550 pf	D, H, L
1	0.5 to 1.0	2000	0.5	-54	100 pf	C, K, G
2	1 to 2	2000	0.5	-53	50 pf	C, K, G
3	2 to 4	2000	0.7	-53	30 p	A
4	4 to 8	2000	0.7	-53	30 pf	A
5	8 to 12	2000	0.8	-52	30 pf	A
6	8 to 16	1500	1.0	-52	30 pf	A
7	12 to 18	1250	1.0	-51	30 pf	A
8	2 to 12	1250	1.2	-52	30 pf	A
9	2 to 18	1000	1.5	-51	30 pff	A

NOTES:

1. K factor is the small signal, open circuit signal sensitivity, Vout/Pin. Measurements are taken at -20 dBm.
2. BW = 2 MHz, NF = 3dB.

3. Video Connector availability:
(Package Style)[Video Connector]
(A)[1, 2 & 3]
(B, C, D, E)[1 & 4]
(F, G, H, I)[1 only]
(J, K, L, M)[5 only]

4. Warranty applies to mount only, not the diode element. This element may be replaced at the factory for a nominal charge of \$50.00
5. RL = 100 ohms.
6. Specifications subject to change without notice.