



Planar Tunnel Diode Detectors

TUNNEL DIODE DETECTORS

DTN Series

100 MHz to 26.5 GHz

- ◆ No Bias Required
- ◆ Ultra Fast Response Time, 10 nsec. typical
- ◆ Excellent Temperature Stability
- ◆ Maximum Input Power = +17 dBm

Operating Temperature Range = -55°C to +115°C

Storage Temperature Range = -65°C to +125°C

Specification @ +25°C, Input Power at -20 dBm

1 Watt TUNNEL LIMITER-DETECTORS

DLN Series

500 MHz to 18 GHz

- ◆ No Bias Required
- ◆ Ultra Fast Response Time, 10 nsec. typical
- ◆ Excellent Temperature Stability
- ◆ Maximum Input Power = +30 dBm

DTN Series

FREQUENCY (GHz)	MODEL NO. ¹	VOLTAGE SENSITIVITY ² (min. mV/mW)	TANGENTIAL SENSITIVITY (min. dBm)	FLATNESS (max. dB)	VSWR (Typical)	VIDEO CAPACITANCE (max. pF)	PACKAGE STYLES AVAILABLE ³
0.1 - 1.0	DTN0110	800	-50	0.75	2.0:1	100	ALL
0.5 - 1.0	DTN0510	1000	-51	0.75	2.0:1	100	ALL
0.5 - 2.0	DTN0520	800	-50	0.70	2.0:1	50	ALL
1.0 - 2.0	DTN1020	1000	-51	0.55	2.0:1	20	ALL
1.0 - 4.0	DTN1040	800	-50	0.70	2.0:1	20	ALL
1.0 - 18.0	DTN1018	700	-50	1.00	3.5:1	20	ALL
1.0 - 26.5	DTN1026	400	-47	1.50	3.5:1	20	ALL
2.0 - 4.0	DTN2040	1000	-51	0.50	2.0:1	10	ALL
2.0 - 8.0	DTN2080	800	-50	0.75	3.0:1	10	ALL
2.0 - 18.0	DTN2018	700	-50	1.00	3.5:1	10	ALL
2.0 - 26.5	DTN2026	400	-47	1.50	3.5:1	10	ALL
4.0 - 8.0	DTN4080	900	-51	0.60	2.5:1	10	ALL
6.0 - 18.0	DTN6018	700	-50	1.00	2.5:1	10	ALL
7.0 - 11.0	DTN7011	800	-50	0.50	2.0:1	10	ALL
8.0 - 12.0	DTN8012	800	-50	0.50	2.5:1	10	ALL
8.0 - 16.0	DTN8016	800	-50	0.70	2.5:1	10	ALL
12.0 - 18.0	DTN1218	750	-50	0.70	2.5:1	10	ALL

DLN Series

0.5 - 2.0	DLN0520	500	-48	1.00	2.0:1	50	M2,M3,R2
1.0 - 18.0	DLN1018	300	-46	1.50	2.5:1	20	M2,M3,R2
2.0 - 18.0	DLN2018	300	-46	1.50	2.5:1	10	M2,M3,R2

¹ Negative output polarity is standard. Change the letter "N" to "P" for positive output polarity.

T_{ss} is measured with a 2 MHz video bandwidth and 2 dB NF amplifier.

³ To indicate package style, add it to the end of the model number. See page 7 for package style specifications.
(i.e. DTP2018M2 - Positive polarity and Package Style "M2")