



LIMITER-PROTECTED TUNNEL DIODE DETECTORS

0.5 - 18 GHz

FEATURES

- Limiter Protected Up to 1 Watt CW
- Broadband Flat Frequency Response
- Optimum Limiter-Detector Interface Design
- Hermetically-Sealed Package
- Fast Pulse Detecting Capability (less than 5nsec Typical Rise Time)
- Excellent Temperature Stability (+/- 0.5dB Typical over Temperature Extremes)



APPLICATIONS

- Radar Equipment
- Transmitter Monitoring
- Power and Signal Monitoring
- Missile Guidance Systems

ENVIRONMENTAL RATINGS

Max Input Power..... 1 Watt CW
 Operating Temperature Range.....-55°C to +100°C
 Storage Temperature Range.....-55°C to +100°C
 Shock..... 50G, 11 msec
 Vibration..... 20G, 100 to 2000 Hz

Specifications: (@ +25°C, Up to -20 dBm Power Input)

MODEL ¹	FREQUENCY RANGE (GHz)	TYPICAL SENSITIVITY K (mV / mW)	TYPICAL ² TSS (dBm)	MAXIMUM FLATNESS (+/- dB)	MAXIMUM INPUT POWER (dBm)	TYPICAL OUTPUT CAPACITANCE (pF)	PACKAGE ³ STYLE
DTL0520	0.5 – 2.0	800	-50	1.0	+ 27	50	B
DTL0520H	0.5 – 2.0	500	-48	1.0	+ 30	50	C
DTL2018	2.0 – 18	600	-49	1.2	+ 27	10	B
DTL2018H	2.0 – 18	300	-46	1.5	+30	10	C
DTL1018	1.0 – 18	600	-49	1.5	+27	20	B
DTL1018H	1.0 – 18	300	-46	1.5	+ 30	20	C

Note 1: Negative output polarity standard. Add "P" to end of model number for positive output polarity.
 Note 2: TSS based on 2 MHz video bandwidth and 2 dB amplifier NF.
 Note 3: See detector package outlines.

For Package Outlines see Outline Drawings Page