

Detector/Limiter Series

500 MHz to 18 GHz

Mercury Systems' detector modules include a broad range of proven configurations that extend from 500 MHz to 18 GHz using three different device types; tunnel, biased Schottky, and zero bias Schottky. All designs include full function circuitry with DC returns and RF bypass capacitors. Module performance and reliability is assured through 100% inspection, mechanical and electrical testing that is performed after a stabilization bake. Modules are optionally available with MIL-STD-883 certification.

Tunnel Diode Detectors

- Excellent Sensitivity at Zero Bias
- Good VSWR with Flat Response over Multi-Octave Bands
- Suitable for CW or High PRF Detection
- Fast and Narrow Pulse Processing
- Excellent Temperature Stability

Schottky Detectors

- Excellent Sensitivity at Optimum Bias
- Extended Dynamic Range, up to +20 dBm
- Moderate Temperature Stability
- High Temperature Rating to +125°C

Zero Bias Schottky Detectors

- Good Sensitivity at Zero Bias, Extended
- Dynamic Range
- Suitable for RF Power Monitoring and Instrumentation

PIN Diode Limiters

Our PIN diode limiters are available in the same high quality packages and configurations as our detectors and provide protection to sensitive microwave components such as mixers, detectors, and amplifiers. Standard configuration provide protection up to 100 Watts peak power with fast recovery time (100 nanoseconds maximum), while holding leakage power to +20 dBm maximum.



Visit our website at <http://rf.mrcy.com> for more information regarding our proven detector and limiter solutions or to connect with our engineers for detailed engineering support.

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