Mercury Systems is a leading commercial provider of secure sensor and mission processing subsystems. Optimized for customer and mission success, Mercury’s solutions power a wide variety of critical defense and intelligence programs.

Miniaturized High-Power Surface Mount RF Limiters

200 Watt peak power limiter for SWaP-sensitive ELINT and EW applications such as missiles, munitions, avionics, and unmanned vehicles.

- 4mm x 3mm footprint
- RF input: 8.5 to 12 GHz
- Moisture sealed package with surface mount connections
- Designed for compatibility with Mercury’s portfolio of low-noise amplifiers

Mercury Systems’ portfolio of high-power surface mount RF limiters are precision engineered to deliver uncompromising performance for SWaP-sensitive applications demanding full functionality in the harshest of operating environments. Unique PIN diode architecture minimizes junction temperatures to assure long life under high-power conditions. By replacing cable interconnects with surface mount technology, physical footprint reductions are enabled without sacrificing performance or reliability.

ELO389 is a miniaturized X-band limiter with input frequencies from 8.5 to 12GHz. Mercury also designs and manufactures complementary broadband surface mount RF limiters, including ELO388 (0.1 to 18GHz). Please contact your Mercury Systems representative for more information.

Specifications

**High-Power Input**
- Frequency range: 8.5 to 12 GHz
- Pulse width: 5 μSec, maximum
- Duty cycle: 6%, maximum
- Peak power: 200 Watts, maximum
- CW power: 15 Watts, maximum

**Microwave Limiter**
- Frequency range: 8.5 to 12 GHz
- Insertion loss: 1.2 dB, maximum
- VSWR: 1.7:1, maximum
- Flat leakage: 17 dBm, maximum
- Spike leakage: 23 dBm, maximum

**General Specifications**
- Operating temperature: -40°C to +85°C
- Storage temperature: -45°C to +125°C
- Dimensions: 4mm x 3mm
- Seal: Moisture sealed