

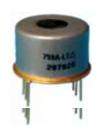
ANALOG MODULES, INC.

MODEL 759A-LT

LOW COST HYBRID EYESAFE LASER RANGEFINDER RECEIVER

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- **HIGH SENSITIVITY**
- **HERMETIC TO-8 PACKAGE**
- FAST RECOVERY LOW MINIMUM RANGE
- InGaAs PIN DETECTOR
- SINGLE +5V SUPPLY AT 25mA
- SECOND GENERATION PROVEN PERFORMANCE



DESCRIPTION:

The *Model 759A-LT* is a low cost hybrid eyesafe laser rangefinder receiver for high volume programs requiring aggressive pricing. Cost savings come from lower cost materials and streamlined conformance test requirements while rigorous process control ensures reliability and performance. Compact construction and PCB mounting capability make the *Model 759A-LT* ideal for miniature applications. Total power consumption of 125mW allows operation from batteries.

SPECIFICATIONS:

Detector 1.54 μ m, InGaAs PIN, 300 μ m +60/-30 μ m \varnothing

Sensitivity 40nW typical, 60nW maximum at 1.54µm,

20ns pulse, 50% detection, 0.1% FAR, 25°C, degrades with narrower pulses and higher

temperatures.

To Pulse

Optical >5µW

Time Programmed Gain (TPG)

 $1/R^2$ law operates from minimum range of ${\sim}20m$ to 1km with separate Tx/Rx optics. Minimum range of 30m with 50mW $T_{\rm O}$ pulse. Open circuit on Pin 11 holds high gain. 0V or GND on Pin 11

holds low gain (-24dB voltage typical).

Adjustments Trigger level is adjustable to optimize pulse

detection characteristics.

Outputs TTL or HCT CMOS compatible, negative

logic. Start/Stop on common line. ≥18ns pulses. Maximum source/sink current

2mA.

Alignment Analog test point for alignment

Power $+5 \pm 0.25$ VDC at 25mA typical

Temperature

Operating -40° to +85°C Storage -55° to +85°C

Connections PCB mount pins

For optional test PCB (Add -PCB to part

number.)

Lid Plating Electroless Nickel

Size 0.616" ∅ x 0.415"_{max}

Weight 0.145 oz (4.1 grams) typical

Specifications subject to change without notice.

APPLICATIONS:

Man-Pack, Weapon-Mount, Vehicle-Mount, TUAV, Airborne Laser Rangefinding

"In the event this commodity will be transferred to a "foreign person" as defined in 22 CFR 120.16, either outside or within the United States, a validated US State Department license is required."

MODEL NUMBER

CONNECTIONS	759A, PCB mount PINS	759A-LT
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Typical Part Number:

759A-LT =

Connections:

PCB mount PINS with optional test PCB

