

#### Not Recommended for New Designs (NRND) See Model 759A

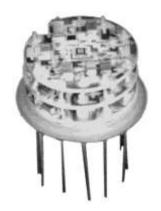
## **MODEL 754**

HYBRID EYESAFE LASER RANGEFINDER RECEIVER

# ANALOG MODULES, INC.

# HYBRID EYESAFE LASER RANGEFINDER RECEIVER

- HIGH SENSITIVITY
- **HERMETIC TO-8 PACKAGE, 0.1 CU INCH**
- FAST RECOVERY LOW MINIMUM RANGE
- InGaAs PIN DETECTOR
- **SINGLE SUPPLY**
- **FIELD PROVEN PERFORMANCE**



## **DESCRIPTION:**

The **Model 754** hybrid eyesafe laser rangefinder receiver is designed for laser rangefinding/surveying equipment. Because of the compact construction (Modified TO-8 header) and the PCB mounting capability, the *Model 754* is ideal for miniature applications. Fast recovery from T<sub>0</sub> overload allows ranging to close objects without compromising long range performance.

#### **SPECIFICATIONS:**

**Detector** 1.54  $\mu$ m, InGaAs PIN, 300  $\mu$ m +60/-30  $\mu$ m  $\varnothing$ 

**Sensitivity** 50 nW typical at 1.54 μm, 28 ns pulse, 50%

detection, 0.1% FAR, 20°C, degrades with

narrower pulses.

T<sub>o</sub> Pulse

Optical >0.1 mW or

Electrical Pull output to zero for 100 ns. An open-drain

FET is recommended.

**Time Programmed Gain (TPG)** 

 $1/R^2$  law operates from minimum range of ~20 m to 2 km with separate Tx/Rx optics. Minimum range ~200 m with 20 mW T<sub>0</sub> pulse. 0.7 V or open enables TPG. 0V or GND inhibits TPG and

holds low gain.

Adjustments Trigger level is adjustable to allow a change in

signal-to-noise ratio.

Outputs TTL or CMOS compatible, negative logic.

Start/Stop on common line. ≥40 ns pulses. 470 Ω pull up to +5 V. Maximum sink current 2 mA.

**Alignment** Analog test point for alignment (pin 2 or 8)

**Power**  $+12 \pm 0.5$  VDC at 25 mA typical

**Temperature** 

Operating  $-45^{\circ}$  to  $+85^{\circ}$ C Storage  $-55^{\circ}$  to  $+125^{\circ}$ C

Connections PCB mount, pins

With optional PCB (Add -PCB to part

number.)

**Size** 0.6" ∅ x 0.425"



Specifications subject to change without notice.

## **APPLICATIONS:**

Laser Rangefinding and Surveying

"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."

| CONNECTIONS | 754, PCB mount, PINS | 754 |
|-------------|----------------------|-----|
|-------------|----------------------|-----|

Typical Part Number: 754-PCB = Connections: PCB mount, PINS with PCB

