

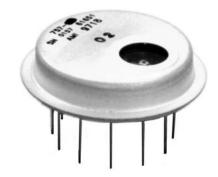


ANALOG MODULES, INC.

HYBRID EYESAFE LASER RANGEFINDER RECEIVER

HYBRID HIGH PERFORMANCE EYESAFE LASER RANGEFINDER RECEIVER

- **HIGH SENSITIVITY BELOW 100nW**
- **OPTIMIZED FOR NARROW PULSES**
- **MINIATURE HERMETIC CONSTRUCTION**
- 300µm InGaAs PIN DETECTOR
- **HIGH RESOLUTION OF MULTIPLE TARGETS**



DESCRIPTION:

The **Model 753A** is a new generation hybrid eyesafe laser rangefinder receiver optimized for high sensitivity and narrow pulses. The single layer construction helps improve detector stability. The window is AR-coated on both sides to reduce losses at $1.54\mu m$ and the detector is offset from the center to avoid undesirable feedback from input to output. The compact construction and PCB mounting capability make it ideal for miniature applications requiring improved target fidelity.

SPECIFICATIONS:

Detector 300μm InGaAs PIN

Sensitivity 100nW (50% Pd, 0.1% FAR,

6ns pulsewidth, 25°C)

Multiple Target Resolution

Small Signal 65ns typical with two equal pulses

Dynamic Range 10⁶:1 with TPG

Temperature Range

Operating -32° to $+65^{\circ}$ C Storage -54° to $+85^{\circ}$ C

Sensitivity decreases for temperatures

greater than +25°C.

Time Programmed

Gain 25:1 typical via external start signal.

Receiver Delay ≤ 8ns

Output TTL negative logic,

18ns pulsewidth minimum

Power $+12 \pm 1$ VDC at 60mA maximum

Start-up Time ≤ 50ms

Size 1.18" ∅ x 0.265"



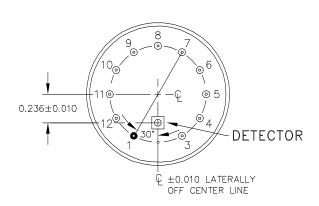
Specifications subject to change without notice.

APPLICATIONS:

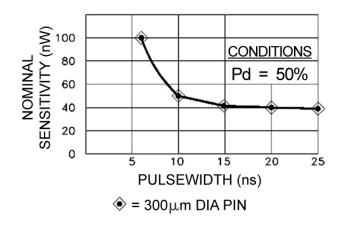
Laser Rangefinding and Surveying

"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."

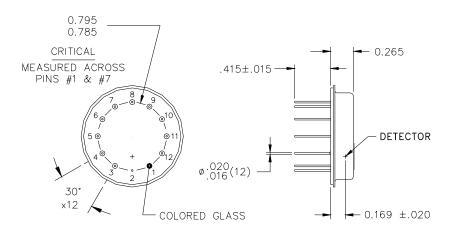
LASER RECEIVER 753A TOP VIEW

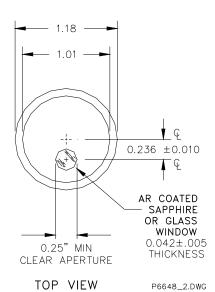


OPTICAL SENSITIVITY vs PULSEWIDTH



UNLESS OTHERWISE SPECIFIED; INCHES \pm 0.01 INCHES \pm 0.005





BOTTOM VIEW