



HYBRID EYESAFE LASER RANGEFINDER RECEIVER

- HIGH SENSITIVITY – 33nW
- HERMETIC LOW PROFILE TO-8 PACKAGE, 0.1 CU. IN.
- FAST RECOVERY – LOW MINIMUM RANGE
- InGaAs PIN DETECTOR
- SINGLE +5V SUPPLY AT 25mA
- SECOND GENERATION PROVEN PERFORMANCE



DESCRIPTION:

The **Model 759A** is a next generation hybrid eyesafe laser rangefinder receiver. The compact construction (modified TO-8 header) and PCB mounting capability make the **Model 759A** ideal for miniature applications. Fast recovery from overload allows ranging to near objects and to multiple closely-spaced targets. The high sensitivity provides excellent long-range performance with small apertures. 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	Outputs	TTL or HCT CMOS compatible, negative logic. Start/Stop on common line. \geq 18ns pulses. Maximum source/sink current 2mA.
Sensitivity	33nW typical, 45nW maximum at 1.54 μ m, 20ns pulse, 50% detection, 0.1% FAR, 25°C, degrades with narrower pulses and higher temperatures.	Alignment	Analog test point for alignment
T_o Pulse Optical	>5 μ W	Power	+5 \pm 0.25VDC at 25mA typical
Time Programmed Gain (TPG)	1/R ² law operates from minimum range of ~20m to 1km with separate Tx/Rx optics. Minimum range of 30m with 50mW T _o pulse. Open circuit on Pin 11 holds high gain. 0V or GND on Pin 11 holds low gain (-24dB voltage typical).	Temperature	Operating -40° to +85°C Storage -55° to +85°C
Adjustments	Trigger level is adjustable to optimize pulse detection characteristics.	Connections	PCB mount pins For optional test PCB (Add -PCB to part number.)
		Lid Plating	Gold over Electroless Nickel
		Size	0.616" \varnothing x 0.415" _{max}
		Weight	0.145 oz (4.1 grams) typical

Specifications subject to change without notice.



APPLICATIONS:

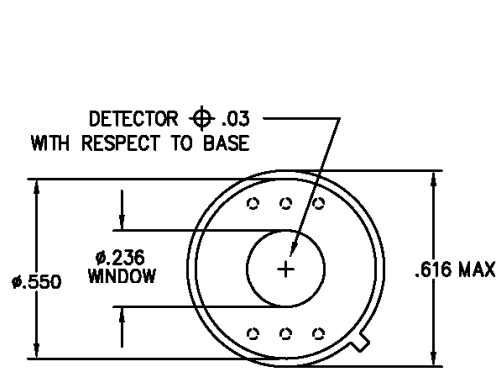
Man-Pack, Weapon-Mount, Vehicle-Mount, TUAV, Airborne Laser Ranging

"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
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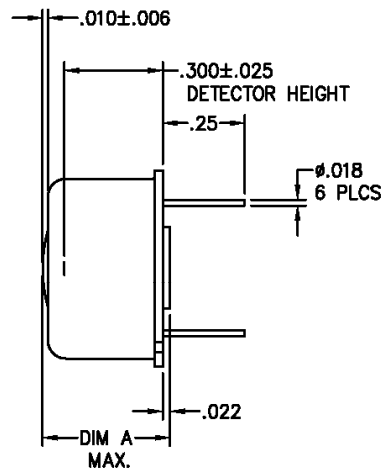
Typical Part Number: **759A-PCB =** Connections: PCB mount PINS with optional test PCB



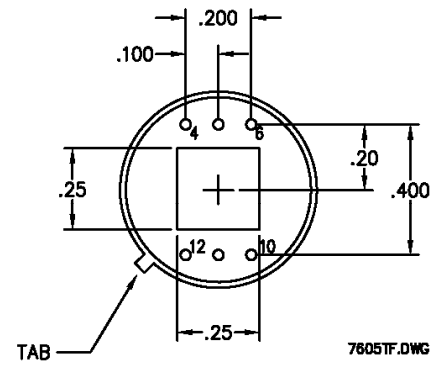
TOLERANCES
.XX= \pm .02
.XXX= \pm .005

WINDOW: $.042 \pm .006$ " THK.

RI = 1.471 \odot 1550nm; 1.477 \odot 1060nm.



MODEL	DIM A
759A	.415



7605TF.DWG