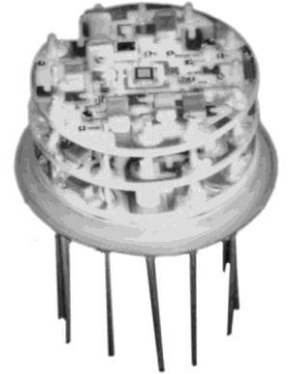


HYBRID LASER RANGEFINDER RECEIVER



- HIGH SENSITIVITY
- HERMETIC TO-8 PACKAGE, 0.1 CU INCH
- FAST RECOVERY – LOW MINIMUM RANGE
- SILICON APD DETECTOR
- NO NEGATIVE SUPPLY REQUIRED
- FIELD PROVEN PERFORMANCE

DESCRIPTION:

The **Model 756** hybrid laser rangefinder receiver is designed for laser ranging/surveying equipment. Because of the compact construction (Modified TO-8 header) and the PCB mounting capability, it is ideal for miniature applications. Fast recovery from T_o overload allows ranging to close objects without compromising long range performance. The incorporation of a $1.06\mu\text{m}$ enhanced silicon APD gives very high sensitivity.

SPECIFICATIONS:

Detector	1.06 μm , enhanced silicon APD, 0.8mm \varnothing Temperature compensated bias regulator	Output	TTL or CMOS compatible, negative logic. Start/Stop on common line. $\geq 40\text{ns}$ pulses. 470 Ω pull up to +5V. Maximum sink current 5mA.
Sensitivity	3nW typical (4nW max.) at 1.06 μm , 28ns pulse, 50% detection, 0.1% FAR, 20°C, degrades with narrower pulses and at higher temperatures.	Alignment	Analog test point for alignment (pin 2 or 8)
T_o Pulse		Power	+12 \pm 0.5VDC at 35mA typical and >450V via current limit resistor at 70 μA . See application notes for external resistor values for various supply voltages.
Optical	>0.2 μW or	Temperature	
Electrical	Pull output to zero for 100ns. An open-drain FET is recommended.	Operating	-32° to +64°C
Time Programmed Gain (TPG)		Storage	-55° to +100°C
1/R ² law operates from minimum range of ~40m to 2km with separate Tx/Rx optics. 0.7V or open enables TPG. 0V or GND inhibits TPG and holds low gain.		Connections	PCB mount, pins
Adjustments	Trigger level is adjustable to allow a change in signal-to-noise ratio.	Size	0.6" \varnothing x 0.425"
		Weight	≤ 0.173 oz (4.9 grams)



Specifications subject to change without notice.

APPLICATIONS:

Laser Ranging 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	756, PCB mount, PINS	756
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Typical Part Number: 756 =

Connections: PCB mount, PINS

MODEL 756 HYBRID RECEIVER
SENSITIVITY vs PULSEWIDTH

