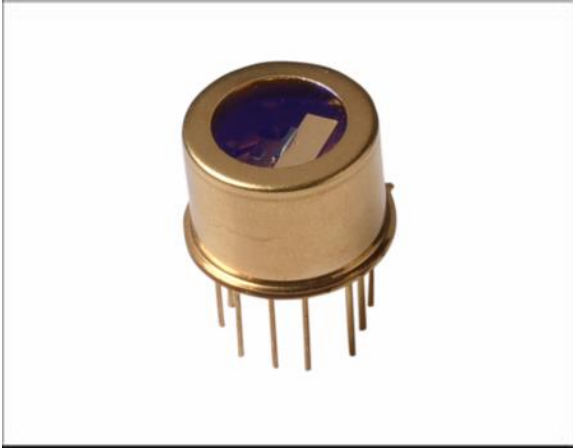


## ***TO-8 Package***

### **TO-8 Package**

The common TO-8 transistor outline package measuring 0.55" in diameter by 0.39" tall and is equipped with TEC cooling with thermistor feedback. It also has a monitor diode and the window cap is epoxied in place for ease of repair in case it is damaged. This is an ideal package for research and academic use.

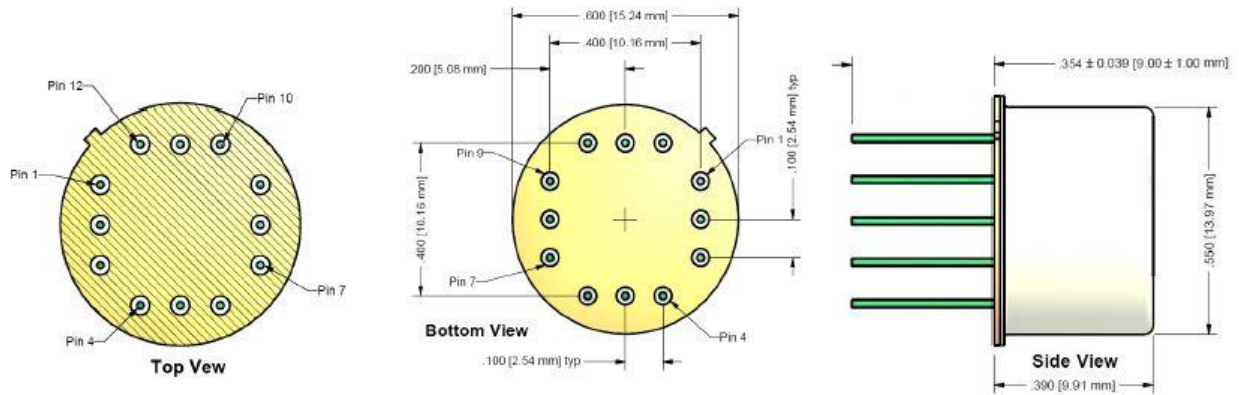


**Beam Characteristics:** Free-space emission is typically  $6^{\circ}$  on the slow axis (horizontal) and  $28^{\circ}$  on the fast axis (vertical). These are FWHM measurements. Our wave-guide software generated beam size is defined differently than conventional methods. We estimate the near field beam waist through the far field divergence measurement. For example: the  $6^{\circ} \times 28^{\circ}$  divergence of a 795nm device has a waist size of 6.7um by 1.4um. The 852nm device at the  $6^{\circ} \times 28^{\circ}$  divergence has a waist size of 7.2um by 1.5um.

**Emission Position:** Light exit area is located behind a 1mm thick BK7 glass window 0.039" from the top surface of the package. The aperture (exit area) size is approximately 1um by 5um. Slightly larger for our tapered ridge devices. Laser emission is within  $\pm 0.5$ mm of center of window.

**Connection:** The TO-8 package can be soldered directly to a PCB with proper heat sinking or may be use with our TO-8 Heat Sink Module providing sub D connectors for ease of use. Case is electrically isolated from all internal components.

***Specification for the TO-8 package***



Pin #	Device	Signal
1	TEC	Pos (+)
2	Laser	Anode
3	Thermistor	Bottom
4	Thermistor	Top
5	Photodiode	Cathode
6	Photodiode	Anode
7	--	Unused
8	Laser	Cathode
9	TEC	Neg (-)
10-12	--	Unused

## How To Order

Part number example: PH780DBRXXXT8.

Assign optical power from those available. Use a three-digit format for all power entries. These devices are sensitive to ESD.

Typical Power (mW)	
040	180
080	240
120	280

