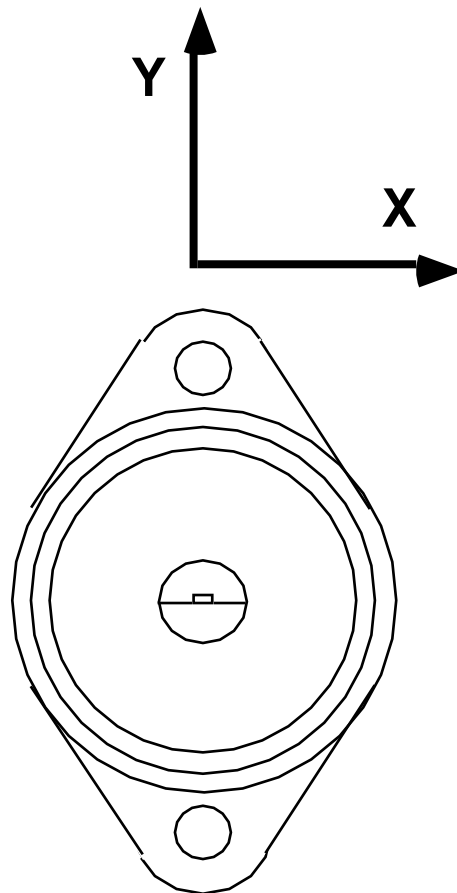


## LASER DIODES IN THE TO-3 PACKAGE

- The package must be screwed down to heatsink which can dissipate the heat generated by the laser and TE-cooler. The heatsink should be cooled well enough so that the temperature rises to no more than 40-45 °C during operation. The surface of the heatsink should be machined flat and smooth so that the base of the package is not bent when the screws are tightened. Screwing the package to a heatsink which is not flat could potentially fracture the TE-cooler inside of the package. A layer of thermal grease between the package and the heatsink is suggested to improve the heat dissipation. When using thermal grease, tighten the fastening screws gently at first to allow excess grease to squeeze out the edges.
- The laser chip is oriented so that the wide dimension (i.e. 150  $\mu\text{m}$ ) is along the X-direction. The narrow dimension (i.e. 1  $\mu\text{m}$ ) is along the Y-direction.
- The light diverges at  $\sim 6\text{-}10^\circ$  FWHM in the X-direction, and at  $\sim 35\text{-}45^\circ$  FWHM in the Y-direction. (FWHM= full width at half-maximum)
- The light is linearly polarized with the electric field vector along the X-direction.
- The laser chip is mounted 1.0 mm inside the front of the package.



TOP VIEW