VISIBLE LASER PRODUCTS

RoHS Conformity

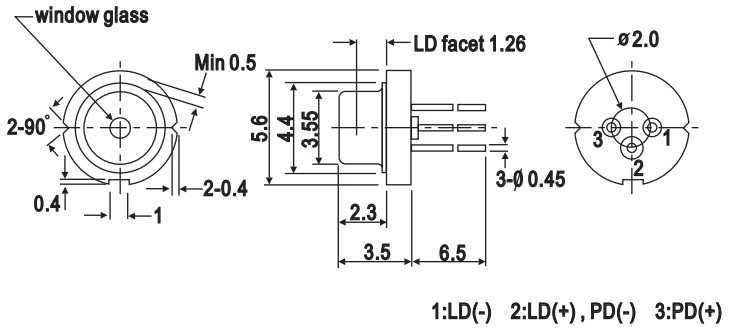
(LASER DIODE)

REV:A
DATE:2005/2/21

ESD PRODUCT !

DEVICE NO:HLDH-635-A-10-01 (635nm, 10mW, TO-18)

PACKAGE DIMENSIONS:



NOTE:
1.All dimensions are in millimeter.
2.Lead spacing in measured where the lead emerge from the package.
3.specifications are subject to change without notice.
4.Tolerance is 0.25mm unless otherwise noted.

ABSOLUTE MAXIMUM RATINGS:

TA=25℃

PARAMETER		SYMBOL	MAX. RATING	UNIT
Optical Output		Po	12	mW
Reverse Voltage	Laser	VR	2	V
	PIN PD	VR(PIN)	30	V
Operating Temperature		Topr	-10 ~ +40	°C
Storage Temperature		Tstg	-40 ~ +85	°C
Lead Soldering Temperature (1.6mm from case Bottom 260 °C for 5 seconds)				

ELECTRIC-OPTICAL CHARACTERISTICS:

TA=25℃

PARAMETER		SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current		Ith	---	---	35	40	mA
Operating Current		Iop	Po=10mW	---	55	65	mA
Operating Voltage		Vop	Po=10mW	2	2.2	2.5	V
Slope Efficiency		η	Po=5~10mW	0.25	0.5	0.65	mW/mA
Monitor Current		Im	Po=10mW	0.03	0.12	0.5	mA
Beam Divergence (FWHM)	Parallel	θ//	Po=10mW	6	7.5	11	Degree
	Perpendicular	$\theta\perp$	Po=10mW	30	33	40	Degree
Parallel Deviation Angle		$\Delta\theta$//	Po=10mW	-2	0	+2	Degree
Perpendicular Deviation Angle		$\Delta\theta\perp$	Po=10mW	-2	0	+2	Degree
Emission Point Accuracy		ΔX	---	-80	0	+80	um
		ΔY	---	-80	0	+80	um
		ΔZ	---	-80	0	+80	um
Lasing Wavelength		λ	Po=10mW	630	637	640	nm

*1. θ// and $\theta\perp$ are defined as the angle within which the intensity is 50% of the peak value.