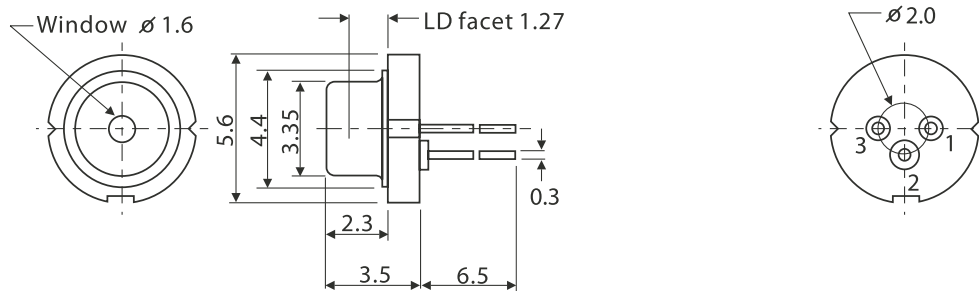


HLDP-650-A-5-02
(650nm, 5mW, TO-18)



Notes

1. All dimensions are in millimeter.
2. Lead spacing is 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

Parameter	Symbol	Max. Rating	Unit
Optical Output	Po	7	mW
Reverse Voltage	Laser VR	2	V
	PIN PD VR(PIN)	30	V
Operating Temperature	Topr	-10~+50	°C
Storage Temperature	Tstg	-40~+80	°C
Lead Soldering Temperature (1.6mm from case Bottom 260 °C for 5 seconds)			

ELECTRIC-OPTICAL CHARACTERISTICS:

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Threshold Current	I _{th}	--	--	18	25	mA
Operating Current	I _{op}	Po=5mW	--	25	35	mA
Operating Voltage	V _{op}	Po=5mW		2.2	2.5	V
Slope Efficiency	η	Po=3-5mW	0.4	0.7	1.1	mW/mA
Monitor Current	I _m	Po=5mW,VRD=5V	0.05	0.2	0.4	mA
Beam Divergence (FWHM)	Parallel θ _{//}	Po=5mW	6	9	11	Degree
	Perpendicular θ _⊥	Po=5mW	24	28	38	Degree
Parallel Deviation Angle	Δθ _{//}	Po=5mW	-3	0	+3	Degree
Perpendicular Deviation Angle	Δθ _⊥	Po=5mW	-3	0	+3	Degree
Emission Point Accuracy	ΔxΔyΔz	Po=5mW	-80	0	+80	um
Lasing Wavelength	λ	Po=5mW	645	655	665	um

*1. θ_{//} and θ_⊥ are defined as the angle within which the intensity is 50% of the peak value.