

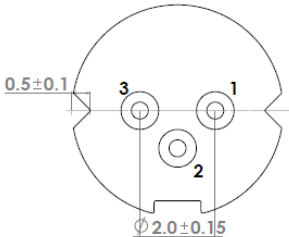
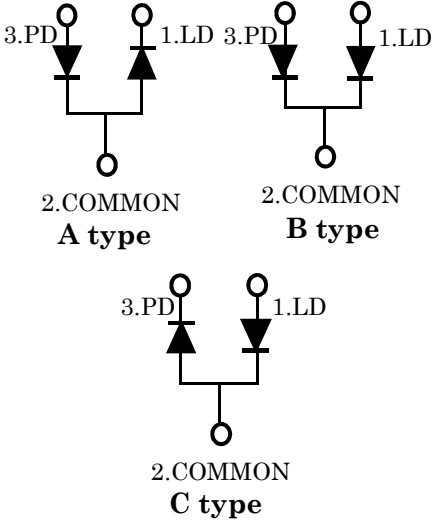
• Application

- Barcode Scanner

• Features

- 650nm Red Laser
- CW laser (Continuous Wave)
- Single Transvers / TE mode laser
- 5.6mm Package

• Electrical Connection

P/N	Pin Configuration	Internal Circuit
QL65D7SA/B/C-L	Bottom View 	 3.PD 1.LD 2.COMMON A type 3.PD 1.LD 2.COMMON B type 3.PD 1.LD 2.COMMON C type

1. ABSOLUTE MAXIMUM RATING

Item	Symbols	Values	Unit
Optical Output Power	P	5	mW
Laser Diode Reverse Voltage	V	2	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	T _{opr}	-10 ~ +70	℃
Storage Temperature	T _{stg}	-40 ~ +85	℃

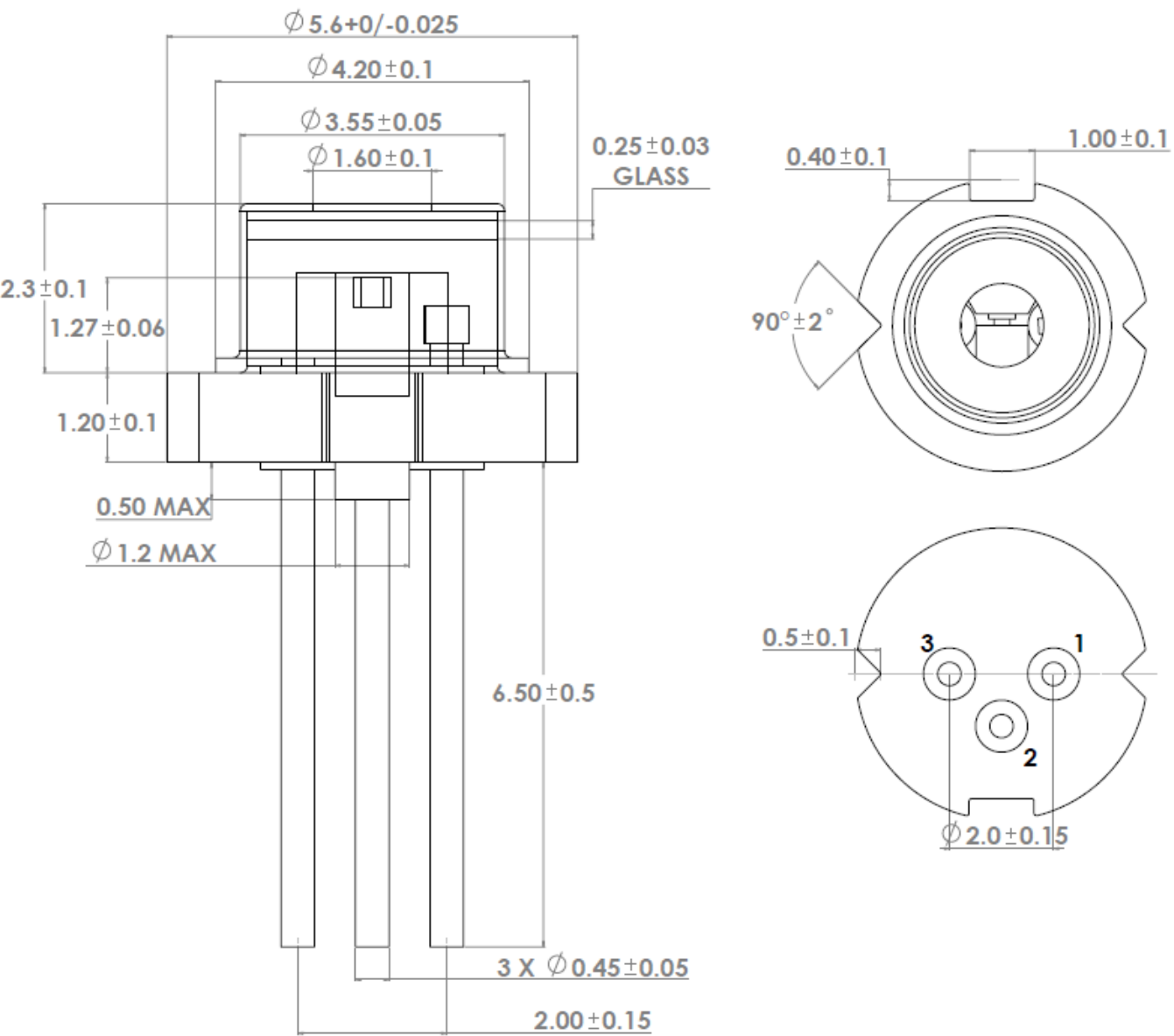
2. ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25 ℃

Item	Symbol	Min	Typ	Max	Unit	Condition
Threshold Current	I _{th}	-	20	30	mA	-
Operating Current	I _{op}	-	27	35	mA	Po=5mW
Operating Voltage	V _{op}	-	2.15	2.6	V	3~5mW
Slope Efficiency	η _s	0.5	0.7	1.0	mW/mA	Po=5mW
Lasing Wavelength	λ _p	650	655	660	nm	Po=5mW
Beam Divergence	θ _{II}	6	8	12	deg	Po=5mW
	θ _⊥	22	27	38	deg	Po=5mW
Beam Angle	Δθ _{II}	-2	-	+2	deg	Po=5mW
	Δθ _⊥	-3	-	+3	deg	Po=5mW
Monitor Current	I _m	0.1	0.2	0.5	mA	Po=5mW
Optical Distance	ΔX, ΔY, ΔZ	-60	-	+60	μm	-

Note : Tc = Case (Stem) temperature

- Use in APC condition with heat sink and do not exceed 5mW 70℃
- The products and product specifications are subject to change without notice.

3. PACKAGE DIMENSION (unit : mm)



Note : Tolerance is $\pm 0.05\text{mm}$ for items without tolerance marking