

- 635nm 7mW 4 0°C
- Red Laser

Feb. 2019 (Ver. 1)

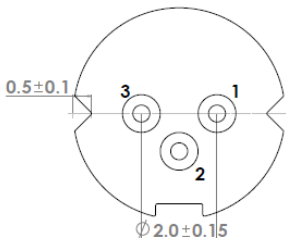
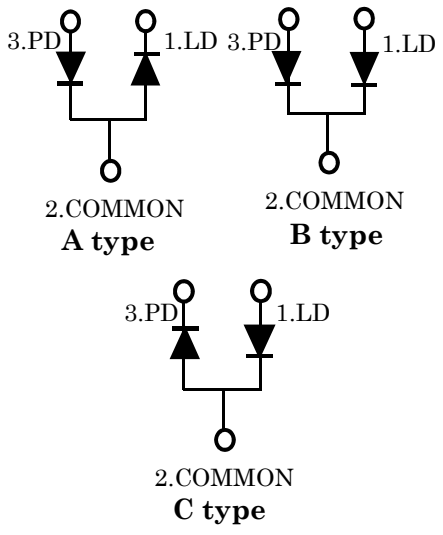
• Application

- Optical leveler
- Laser Pointer

• Features

- 635nm Red Laser
- CW laser (Continuous Wave)
- Single Transvers / TM mode laser
- 5.6mm Package

• Electrical Connection

P/N	Pin Configuration	Internal Circuit
QL63E4SA/B/C-NR1	Bottom View 	 A type B type C type

1. ABSOLUTE MAXIMUM RATING

Item	Symbols	Values	Unit
Optical Output Power	P	7	mW
Laser Diode Reverse Voltage	V	2	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	T _{opr}	-10 ~ +40	℃
Storage Temperature	T _{stg}	-40 ~ +85	℃

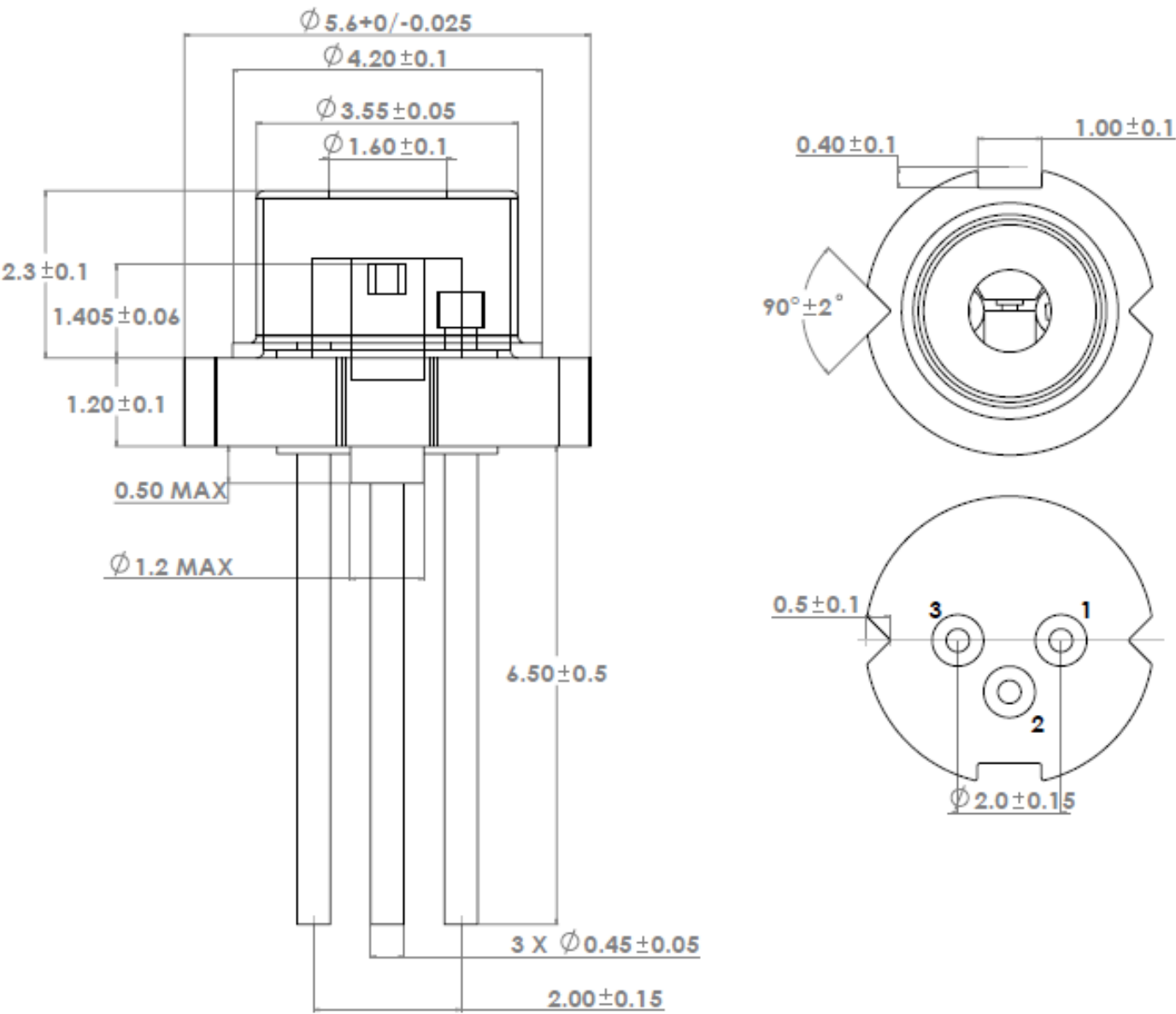
2. ELECTRICAL and OPTICAL CHARACTERISTICS at Tc=25 ℃

Item	Symbol	Min	Typ	Max	Unit	Condition
Threshold Current	I _{th}	-	22	32	mA	-
Operating Current	I _{op}	-	30	40	mA	Po=5mW
			35	45	mA	Po=7mW
Operating Voltage	V _{op}	-	2.2	2.6	V	Po=5mW
Slope Efficiency	η _s		0.7	1.2	mW/mA	Po=5mW
Lasing Wavelength	λ _p	630	637	642	nm	Po=5mW
Beam Divergence	θ _{II}	6	8	12	deg	Po=5mW
	θ _⊥	28	32	38	deg	Po=5mW
Beam Angle	Δθ _{II}	-2	-	2	deg	Po=5mW
	Δθ _⊥	-3	-	3	deg	Po=5mW
Monitor Current	I _m	0.05	0.1	0.25	mA	Po=5mW
		0.05	0.15	0.3	mA	Po=7mW
Optical Distance	ΔX, ΔY, ΔZ	-60	-	+ 60	um	-

Note : Tc = Case (Stem) temperature

- Use in APC condition with heat sink and do not exceed 5mW 50℃
- 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