

Φ10.5mm 650nm

Features

1. APC (auto power control) driver IC inside.
2. 5mW output power.
3. The output beam is aligned to the centre-line of the module. The tolerance of $\theta / 2$ is $\pm 0.05^\circ$. It is a special purpose, reliable visible laser module and features in small size and easy operation.



Part No. Indications:

APC D – 650 – 12– C3 – A

Pin connection:

A — Heat sink stand (–)

B — Heat sink stand (+)

Output power: C3 — <5mW

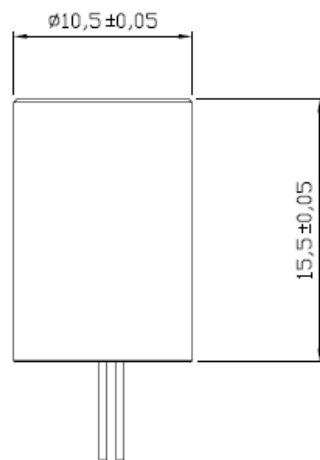
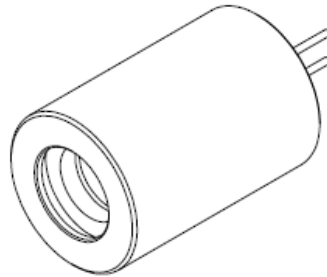
Absolute maximum ratings

Item	Symbol	Rating	Unit
Power supply voltage	V_{cc}	3.3	V
Laser Module optical output power	P_o	<5	mW
Operation temperature	T_{opr}	-5~40	°C
Storage temperature	T_{stg}	-20~60	°C

Electrical and optical characteristics ($T_c=25^\circ C$)

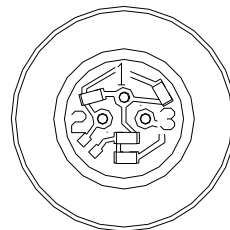
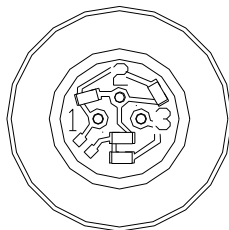
Item	Symbol	Min.	Typ.	Max	Unit	Condition
Wavelength	λ	650	655	660	nm	$P_o=4.5mW$
Output power	P_{out}	2	4.5	5	mW	$V_{cc}=3V$
Operation current	I_{op}	-	30	40	mA	$P_o=4.5mW$ $V_{cc}=3V$
Operation voltage	V_{op}	2.8	-	3.3	Volt	
Laser Beam spot size at 10m						<15mm
Divergence angle						1.2 mrad
Coaxial precision						$\theta < 0.1$ degree
Mean time to failure (MTTF) 4.5 mW 25°C						>10000 hrs

Outline dimensions (Units: mm)



A type : Heat sink stand (-)

B type :Heat sink stand (+)



Pin 1 : Vcc

Pin 2 : GND

Pin 3 : NC (no external connection)

Laser Safety Precautions

1. Do not look into the laser beam directly by eyes. The laser beam may cause severe damage to human eyes.
2. Optical Lens is made of plastic or glass . Do not contaminate lens by soiling, oil or chemical.