

BLUE LASER MODULE

SML-445-5-1-R



SEMICOM
V I S U A L

Features

Wavelength: 445nm (Typ.)
Output power: $P_o = 5\text{mW}$ (Typ.)
Package: $\varnothing 10\text{mm}$ (RoHS compliant)

Applications

Laser pointer
Laser marker

Absolute Maximum Ratings

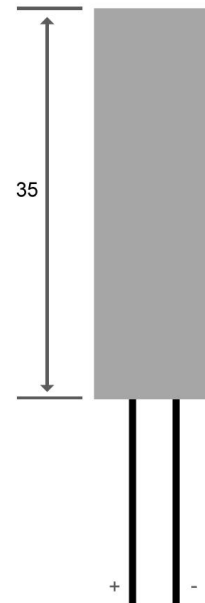
($T_c=25^\circ\text{C}$)

| Parameter | Symbol | Ratings | Unit |
|-------------------------------------|------------|------------|------------------|
| Light Output CW | P_o (CW) | 5 | mW |
| Operating Voltage | Vcc | +6 | V |
| Operating Temperature ¹⁾ | Topr | -10 to +50 | $^\circ\text{C}$ |
| Storage Temperature | Tstg | -40 to +80 | $^\circ\text{C}$ |

1) Case Temperature

Package

(Unit : mm)



Electrical and Optical Characteristics

($T_c=25^\circ\text{C}$)

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|----------------------------------|--------------|--|------|------|------|------|
| Operating Current | Iop | CW | | | 90 | mA |
| Supply Voltage | Vcc | | | +6 | | V |
| Beam Diameter ^(*)2) | 2wr | $\Delta l = 10\text{m}$ ^(*)3) | | | 5 | mm |
| | 2wr | $\Delta l = 20\text{m}$ ^(*)3) | | | 10 | mm |
| Beam Divergence ^(*)2) | 2 θ_r | | | | 0.2 | mrad |
| Lasing Wavelength | λ_p | $\Delta l = 5\text{m}$ ^(*)3) | 440 | 445 | 450 | nm |

(*)2) X axial direction (*)3) Measurement distance from laser aperture

CDRH Class: Class IIIa,
Case material: Brass
MTTF: 10,000 hours

Note: The above specification is subject to change without notice

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