

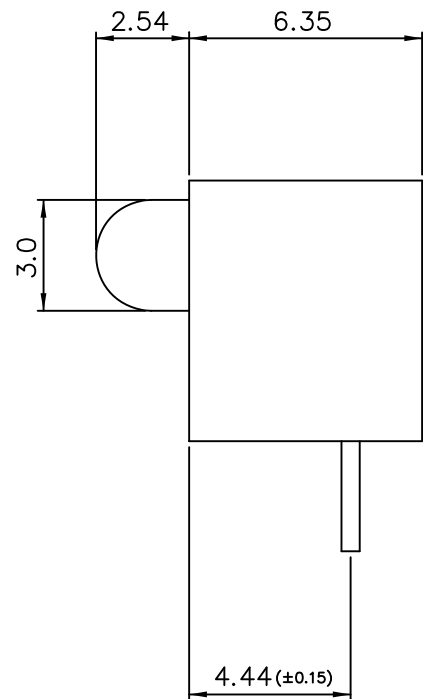
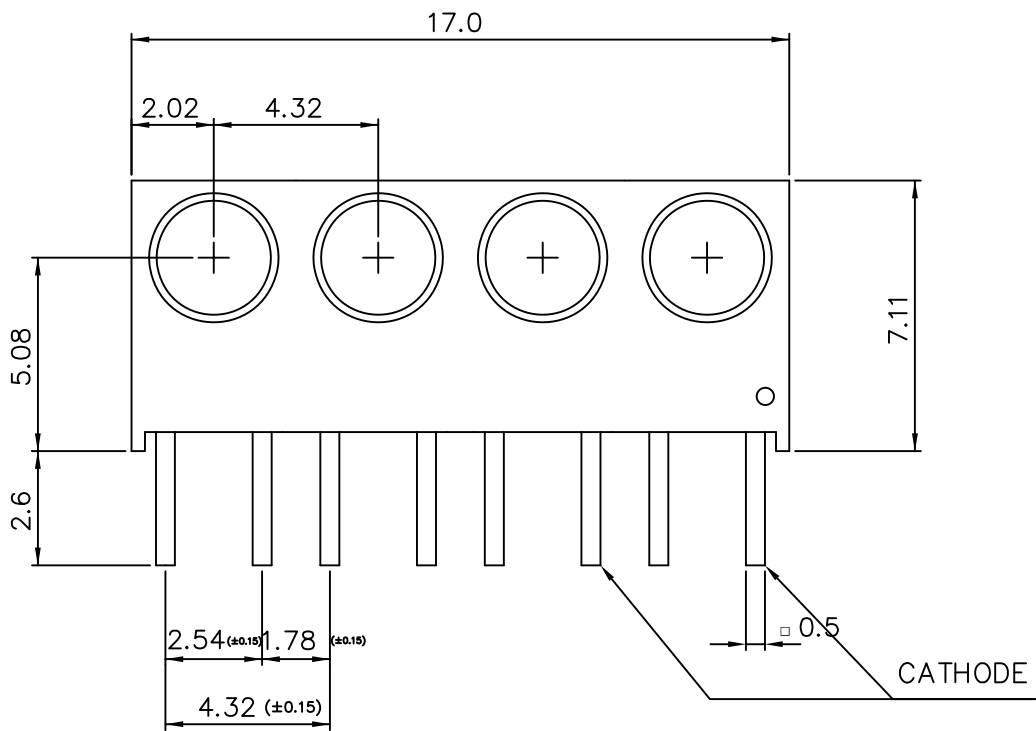
- 规格书 -

产品型号： SEA-01-2222

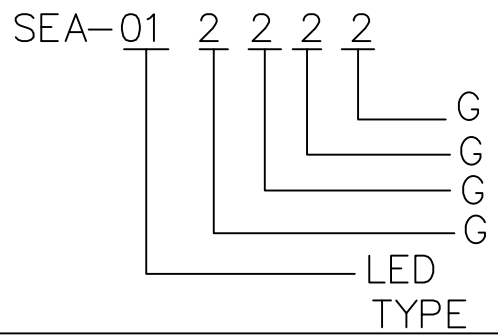
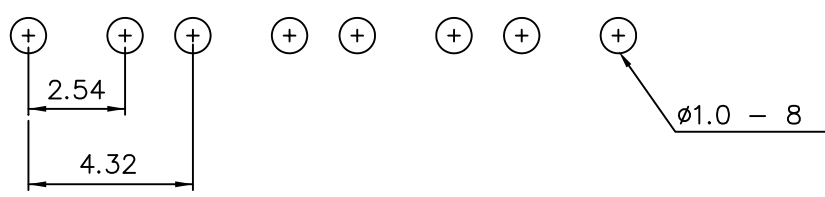
产品名称： LED模组

SM SWITCH CO.,LTD

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P.C.B DIMENSION



| | | | | | | | |
|------------------------------|--|--|--|----------|---------|---------|----------------------|
| NOTE: GENERAL TOLERANCE ±0.3 | | | | | | | |
| △ | | | | APPD | CHKD | DSGD | LED MODULE |
| △ | | | | | | | |
| △ | | | | WANG Y.D | KIM J.S | LEE H.S | MODEL SEA-01-2222 |
| △ | | | | | | | |
| △ | | | | | | | |
| NO | | | | | | | |

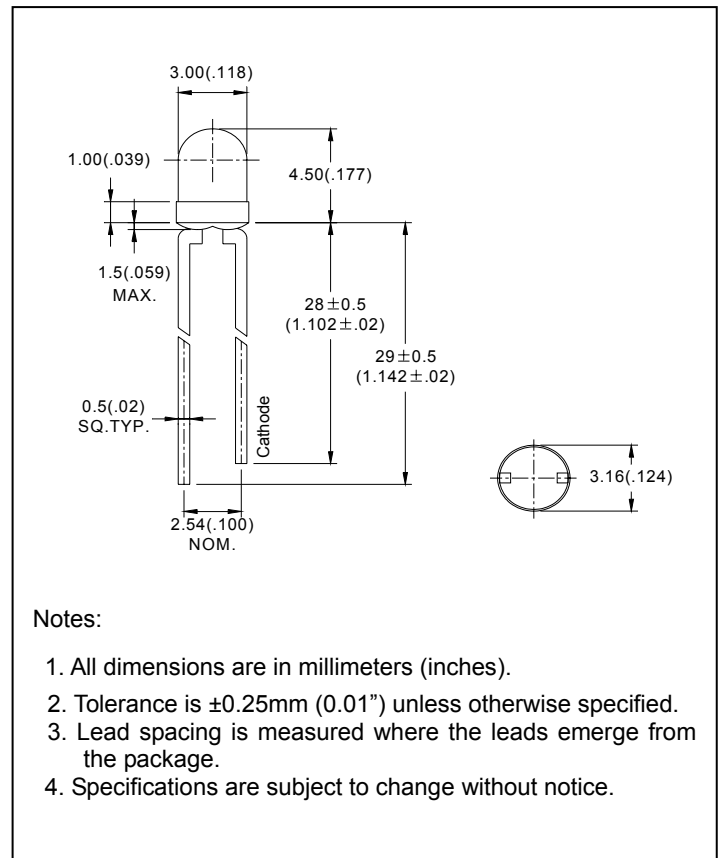
● Features:

1. Chip material: GaP /GaP
2. Emitted color : Green
3. Lens Appearance : Green Diffused
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. 3mm diameter package
9. This product don't contained restriction substance, compliance ROHS standard.

● Applications:

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

● Package dimensions



● Absolute maximum ratings($T_a=25^\circ\text{C}$)

| Parameter | Symbol | Rating | Unit |
|------------------------------------|----------|--|------|
| Power Dissipation | Pd | 80 | mW |
| Forward Current | I_F | 30 | mA |
| Peak Forward Current* ¹ | I_{FP} | 150 | mA |
| Reverse Voltage | V_R | 5 | V |
| Operating Temperature | Topr | $-40^\circ\text{C} \sim 85^\circ\text{C}$ | |
| Storage Temperature | Tstg | $-40^\circ\text{C} \sim 100^\circ\text{C}$ | |
| Soldering Temperature | Tsol | 260°C max (for 5 seconds) | |
| Hand Soldering Temperature | Tsol | 350°C max(for 3 seconds) | |

*¹Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width.

● Electrical and optical characteristics(Ta=25°C)

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|--------------------------|------------------|------------|------|------|------|---------|
| Forward Voltage | V_F | $I_F=20mA$ | - | 2.2 | 2.6 | V |
| Luminous Intensity | I_v | $I_F=20mA$ | - | 35 | - | mcd |
| Reverse Current | I_R | $V_R=5V$ | - | - | 100 | μA |
| Peak Wave Length | λ_p | $I_F=20mA$ | - | 568 | - | nm |
| Dominant Wave Length | λ_d | $I_F=20mA$ | 560 | - | 576 | nm |
| Spectral Line Half-width | $\Delta \lambda$ | $I_F=20mA$ | - | 30 | - | nm |
| Viewing Angle | $2\theta_{1/2}$ | $I_F=20mA$ | - | 45 | - | deg |

● Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

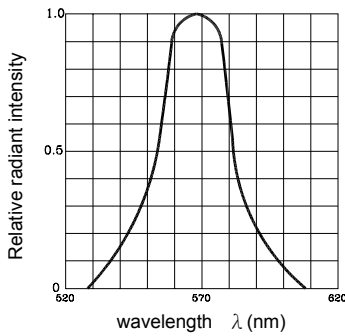


Fig.2 Forward current derating curve vs. Ambient temperature

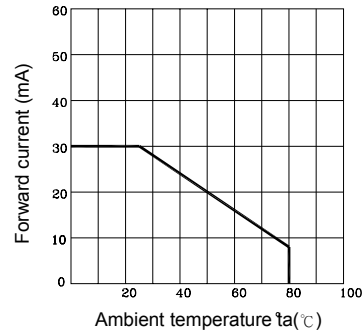


Fig.3 Forward current vs. Forward voltage

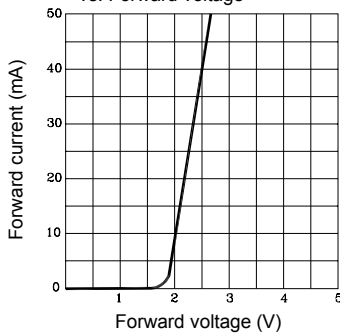


Fig.4 Relative luminous intensity vs. Ambient temperature

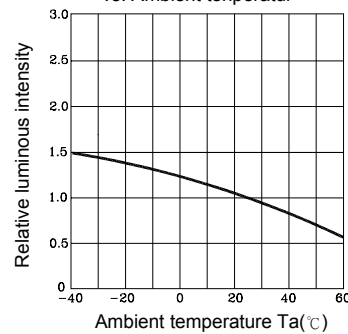


Fig.5 Relative luminous intensity vs. Forward current

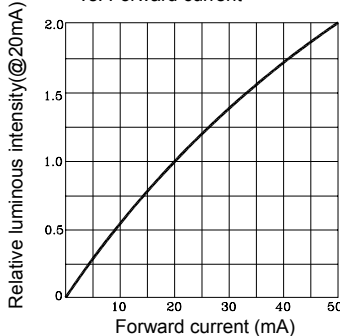
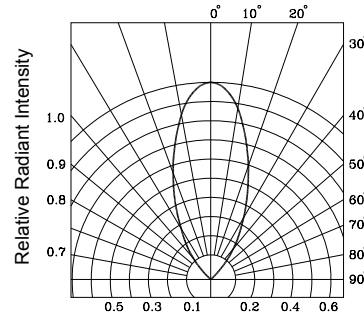


Fig.6 Radiation diagram



● Bin Limits

1. Intensity Bin Limits (At $I_F = 20\text{mA}$)

| Bin Code | Min. (mcd) | Max. (mcd) |
|----------|------------|------------|
| K | 12.3 | 18.5 |
| L | 18.5 | 28 |
| M | 28 | 42 |
| N | 42 | 63 |
| P | 63 | 94 |

● Bin : x



NOTES: 1. Tolerance of measurement of luminous intensity.

: $\pm 15\%$

● DIP soldering (Wave Soldering)

Preheating : 120°C , within 120~180 sec.

Operation heating : $255^\circ\text{C} \pm 5^\circ\text{C}$ within 5 sec. 260°C (Max)

Gradual Cooling (Avoid quenching).

