

Model: L-TSY3-C01
 120 Degree 3.2 x 2.8mm SMT-LED in Amber Color with Water Transparent

Dice Material:
 AlGaInP

Applications:

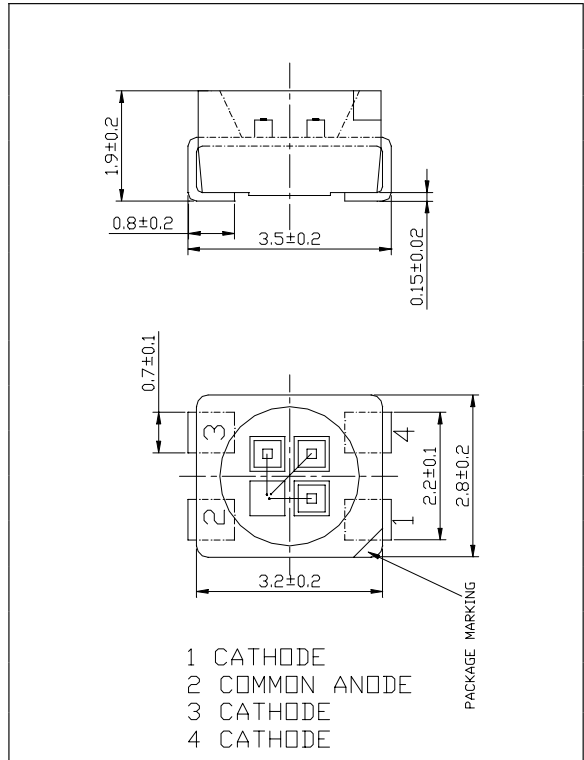
- Indicators
- Illuminations
- LCD Back Lights
- Automobile's Applications

Absolute Maximum Ratings at Ta = 25°C

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	I _F	3 X 50	mA
Peak Forward Current*	I _{FP}	3 X 200	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	3 X 130	mW
Operation Temperature	T _{opr}	-40 ~ + 100	°C
Storage Temperature	T _{stg}	-40 ~ + 100	°C
Junction temperature	T _j	+110	°C
Junction/ambient **	R _{th JA}	3 X 650	°C/W
Junction/solder point	R _{th JS}	3 X 430	°C/W

*pulse width<=0.1msec duty<=1/10 ** Rth test condition: Mounted on PC Board FR 4(pad size>=16mm²)

Dimension Drawing



Typical Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F = 3 X 20mA	---	2.3	2.6	V
Reverse Current	I _R	V _R = 5V	---	---	10	μA
Luminous Intensity	I _v	I _F = 3 X 20mA	560	800	---	mcd
Dominant Wavelength	λ _D	I _F = 3 X 20mA	584	591	596	nm
50% Power Angle	2 θ _{1/2}	I _F = 3 X 20mA	---	120	---	deg

Ranks Combination (I_F = 20mA)

Rank	U2	V1	V2
Luminous Intensity	560-710mcd	710-900mcd	900-1120mcd

Important Notes:

- 1) Tolerance of measurement of luminous intensity is ±10%
- 2) Tolerance of measurement of dominant wavelength is ±1nm
- 3) Tolerance of measurement of Vf is ±0.05 V.



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Graphs

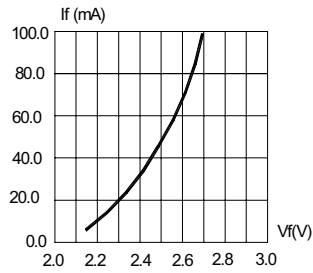


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

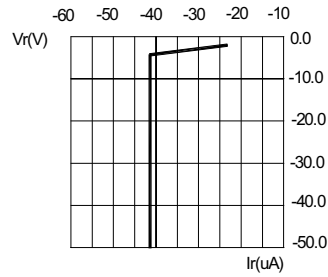


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

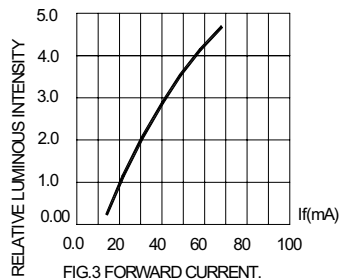


FIG.3 FORWARD CURRENT.

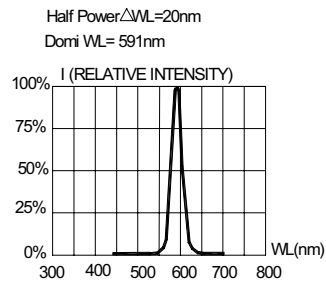


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

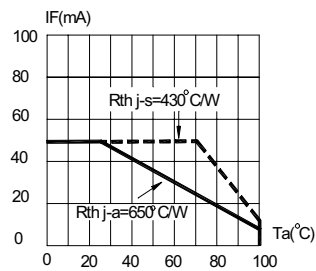


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON $T_{jmax}=110^{\circ}C$

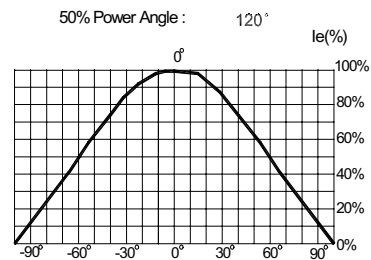


FIG.6 SPATIAL DISTRIBUTION.