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**Model: L-TPG1 -C01**  
 120 Degree 3.2 x 2.8mm SMT-LED in Pure Green Color with Water Transparent

**Dice Material:**  
 InGaN

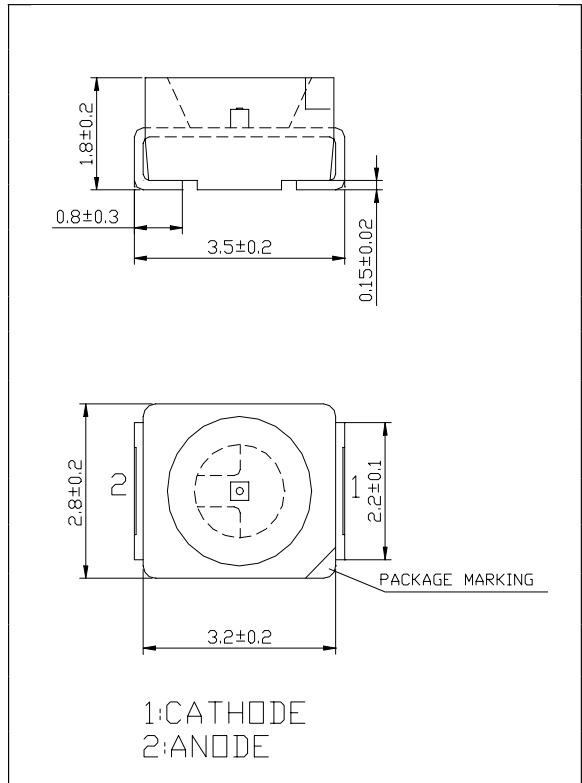
**Applications:**

- Indicators
- Illuminations
- LCD Back Lights
- Automobile's Applications
- RGB Full Color Displays

**Absolute Maximum Ratings at Ta = 25°C**

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	$I_F$	25	mA
Peak Forward Current*	$I_{FP}$	100	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	105	mW
Operation Temperature	$T_{opr}$	-40 ~ + 100	°C
Storage Temperature	$T_{stg}$	-40 ~ + 100	°C
Junction temperature	$T_j$	+110	°C
Junction/ambient **	$R_{th JA}$	450	°C/W
Junction/solder point	$R_{th JS}$	300	°C/W

**Dimension Drawing**



\*pulse width  $\leq 0.1\text{msec}$  duty  $\leq 1/10$  \*\* Rth test condition: Mounted on PC Board FR 4(pad size  $\geq 16\text{mm}^2$ )

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

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 20\text{mA}$	---	3.6	4.2	V
Reverse Current	$I_R$	$V_R = 5\text{V}$	---	---	10	$\mu\text{A}$
Luminous Intensity	$I_V$	$I_F = 20\text{mA}$	355	560	---	mcd
Dominant Wavelength	$\lambda_D$	$I_F = 20\text{mA}$	520	525	540	nm
50% Power Angle	$2\theta_{1/2}$	$I_F = 20\text{mA}$	---	120	---	deg

**Ranks Combination ( $I_F = 20\text{mA}$ )**

Rank	T2	U1	U2	V1
Luminous Intensity	355-450 mcd	450-560 mcd	560-710 mcd	710-900 mcd

**Important Notes:**

- 1) Tolerance of measurement of luminous intensity is  $\pm 10\%$
- 2) Tolerance of measurement of dominant wavelength is  $\pm 1\text{nm}$
- 3) Tolerance of measurement of Vf is  $\pm 0.05\text{V}$ .

### Graphs

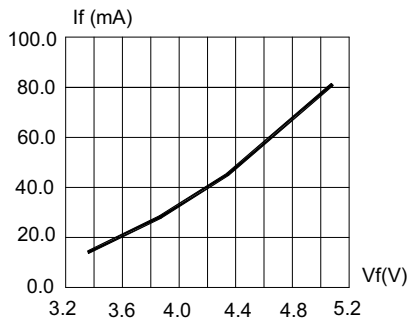


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

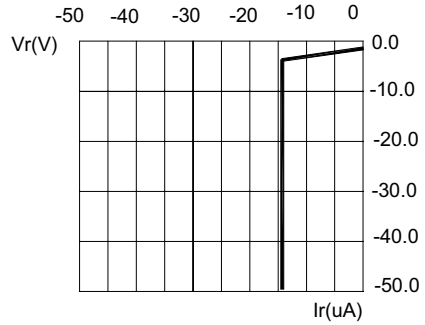


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

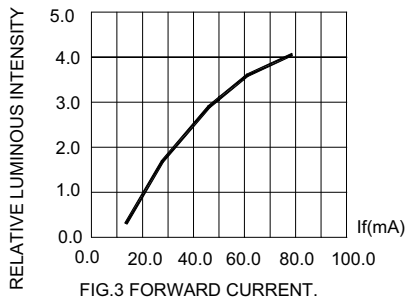


FIG.3 FORWARD CURRENT.

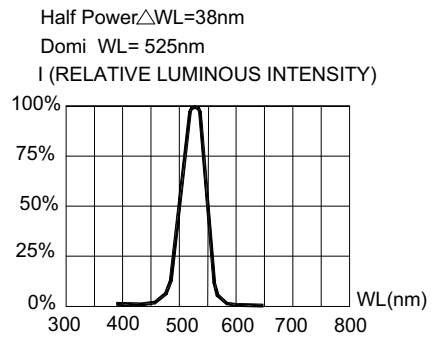


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

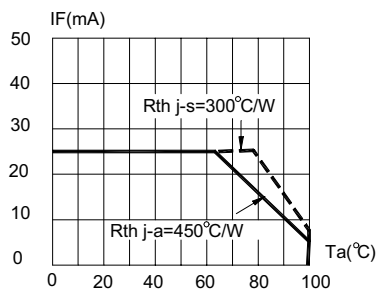


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON  $T_{jmax}=110^{\circ}C$

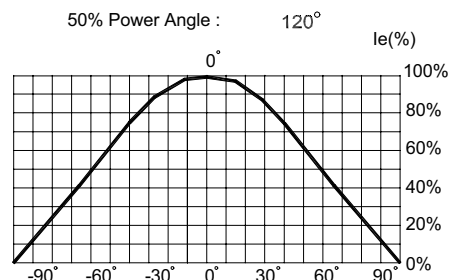


FIG.6 SPATIAL DISTRIBUTION.