



# EVERLIGHT ELECTRONICS CO.,LTD.

PART NO : 30-01SUGC/C525 Device Number : DLE-300-024 REV: 1.0  
ECN : \_\_\_\_\_ Page: 1/4

## ■ Benefits :

- Fewer LEDs Required
- Lowers Lighting System Cost



## ■ Features :

- High Flux Output.
- Designed for High Current Operation.
- Low Thermal Resistance.
- Low Profile.
- Packaged in Tubes for Use with Automatic Insertion Equipment.

## ■ Applications :

- Automotive Exterior Lighting
- Electronic Signs and Signals

## ■ Descriptions :

This revolutionary package design allows the lighting designer to reduce the number of LEDs required and provide a more uniform and unique illuminated appearance than with other LED solutions.

This is possible through the efficient optical package design and high-current capabilities.

The low profile package can be easily coupled with reflectors or lenses to efficiently distribute light and provide the desired lit appearance.

This product family employs the world's brightest red-orange and amber LED materials, which allow designers to match the color of popular lighting applications, such as automotive tail, stop, and turn signal lamps, and electronic signs.

PART NO	Chip		Lens Color
	Material	Emitted Color	
30-01SUGC/C525	InGaN/SiC	Super Green	Water Clear

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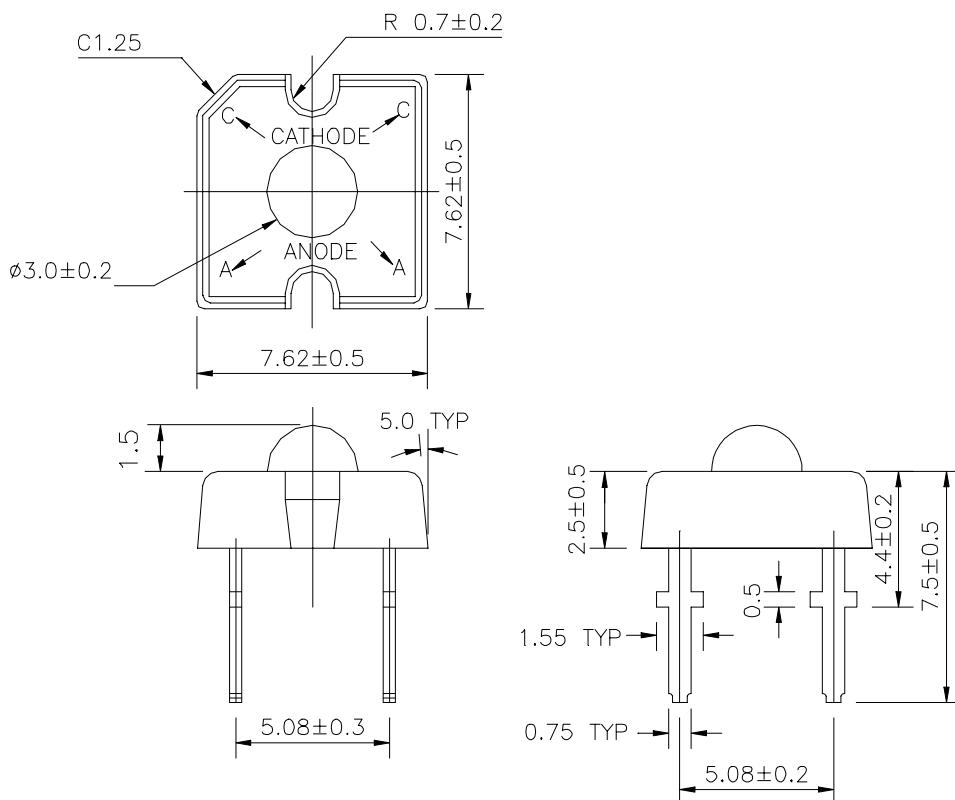


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■ Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Forward Current	IF	30	mA
Operating Temperature	Topr	-40 to +85	$^\circ\text{C}$
Storage Temperature	Topr	-40 to +100	$^\circ\text{C}$
Soldering Temperature	Tsol	$260 \pm 5$	$^\circ\text{C}$
Power Dissipation	Pd	100	mW
Peak Forward Current(Duty 1/10 @ 1KHz)	IF(Peak)	120	mA
Reverse Voltage	VR	5	V

■ Package Dimensions:



Notes :

1. All dimensions are millimeter.(inch)
2. An epoxy meniscus may extend about 1.5mm(0.059") down the lead.



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■ Electro-Optical Characteristics :

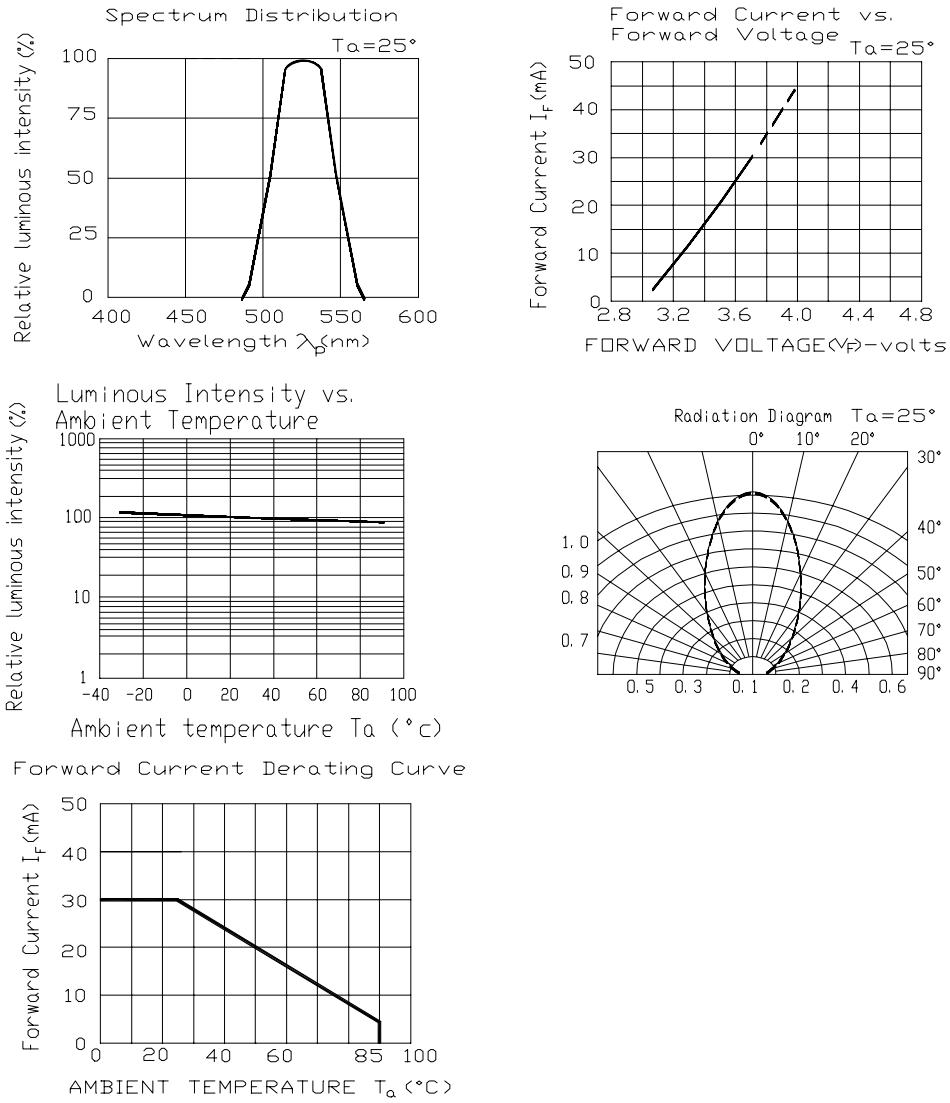
Parameter	Symbol	Min.	Typ.	Max.	Condition	Unit
Total Flux	$\Phi_v$	250	400	----	$I_F=20mA$	mlm
Viewing Angle	$2\theta_{1/2}$	----	50	----	$I_F=20mA$	deg
Peak Wavelength	$\lambda_p$	----	518	----	$I_F=20mA$	nm
Dominant Wavelength	$\lambda_d$	----	525	----	$I_F=20mA$	nm
Spectrum Radiation Bandwidth	$\Delta\lambda$	----	35	----	$I_F=20mA$	nm
Forward Voltage	$V_F$	----	3.5	4.0	$I_F=20mA$	V
Reverse Current	$I_R$	----	----	10	$V_R=5V$	$\mu A$
Recommened Operating Current	$I_F$ (Rec)	----	----	20		mA
DC Forward Current	$I_F$ (mA)	----	----	30		mA

■ Reliability test items and conditions

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP:260°C ± 5 °C	5 SEC	76 PCS	0/1
2	Solderability	TEMP:230°C ± 5 °C	5±1 SEC	76 PCS	0/1
3	Temperature Cycle	H : +85°C 30min § 5 min	50 CYCLES		
		L : -55°C 30min		76 PCS	0/1
4	Thermal Shock	H : +100°C 5min § 10 sec	50 CYCLES		
		L : -10°C 5min		76 PCS	0/1
5	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
6	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 PCS	0/1
7	DC Operating Life	$I_F(max)$ mA	1000 HRS	76 PCS	0/1
8	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1



■ Typical Electro-Optical Characteristic Curves



■ Specifications for Bin Grading

30-01SUGC/C525 —

(1) (2) (3)

(1) $V_f(v)$			(2) $\lambda d(nm)$			(3) $\Phi v(mlm)$		
Bin	Min	Max	Bin	Min	Max	Bin	Min	Max
1	3.0	4.0	0	515	535	T	250	500
						U	400	800
						V	630	1250