

## 5mm 20° White LED YE-W5S20N

### Features:

- High Luminous Output White LED
- Chip Technology: InGaN
- Water Clear Epoxy Package
- Lens Size: 5mm
- Viewing Angle: 20°

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

Item	Symbol	Absolute Maximum Rating	Unit
DC Forward Current	$I_F$	20	mA
Peak Pulsed Forward Current	$I_{FP}$	150	mA
Reverse Voltage	$V_R$	5	V
Derating Factor		0.40	mA/°C
Power Dissipation	$P_d$	120	mW
Operating Temperature	$T_{opr}$	-30 ~ +85° C	° C
Storage Temperature	$T_{stg}$	-40 ~ +100° C	° C
Solder Dipping Temperature	$T_{sld}$	260° C for 5 sec	

Note: Duty Ratio = 1/16, Pulse Width = 0.1ms

Electrical/Optical Characteristics at Ta = 25° C

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	$V_f$	2.9	3.2	3.5	V	$I_f = 20$ mA
Luminous Intensity	$I_v$	15500	21000	31000	mcd	$I_f = 20$ mA
Reverse Current	$I_r$			10	mA	$V_r = 5V$

Luminous Intensity Bin Limits:

Bin V: 21000 to 31000 mcd

Bin U: 15500 to 21000 mcd

Color Ranks:

Bin	CIE				
A	X	0.280	0.264	0.283	0.296
	Y	0.248	0.267	0.305	0.276
B	X	0.296	0.283	0.330	0.330
	Y	0.276	0.305	0.360	0.318
C	X	0.330	0.330	0.361	0.356
	Y	0.318	0.360	0.385	0.351

Note that deliveries may include up to three color ranks and two luminous intensity ranks. TheLEDLight.com carries discrete LEDs for the do-it-yourself trade and for low volume commercial prototyping and experimentation. Bins and ranks may vary.

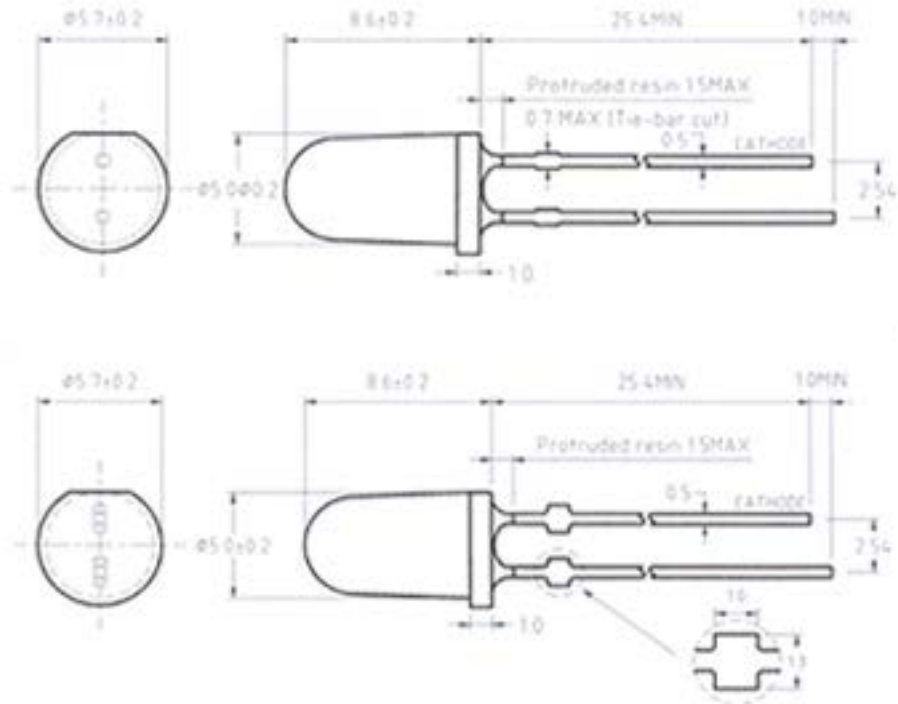
If you need a quantity of a specific luminous intensity bin or color rank, contact us for assistance with price and availability of specific bins or ranks.

[www.TheLEDLight.com](http://www.TheLEDLight.com)

email: [Sales@TheLEDLight.com](mailto:Sales@TheLEDLight.com)

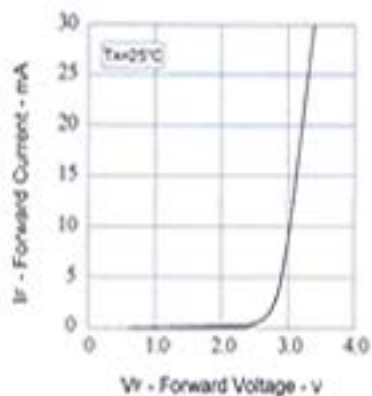
Phone: 1-775-841-4490

Fax: 1-775-841-4491

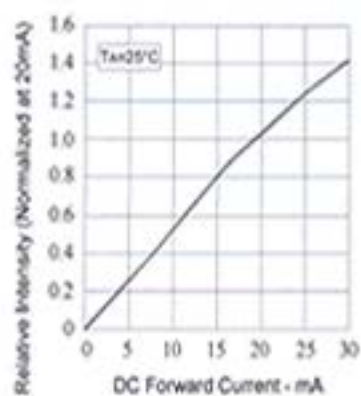


### Electrical / Optical Characteristics Diagram at $T_a = 25^\circ\text{C}$

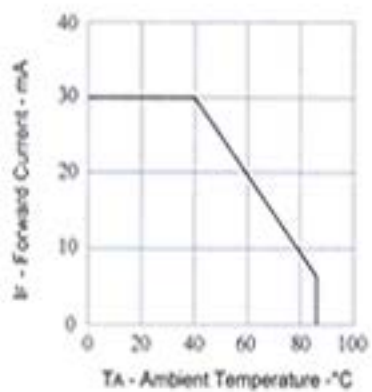
Forward Current vs. Forward Voltage



Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temperature



Spectrum

