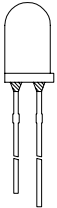


- Features**
- Produced with steel leadframe
 - Supplied with standard leads
 - Class II ESD Rating
 - Water clear epoxy
 - Products bin coded for hue
 - Advanced optical-grade epoxy for superior high temperature and high moisture resistance performance


Electro / Optical Characteristics $I_F = 20 \text{ mA}$ $T_a = 25^\circ \text{ C}$

Lamp Package	LED Part Number	Emitting Colour	Leads	Die Material	Colour Temperature Range	Forward Voltage V_F		Luminous Intensity I_V		Viewing \angle 20 $\frac{1}{2}$
						typical	max	min	max	
	FCCL-R515WWCSL	White	Std	InGaN/SiC	W3 and W4	3.20	4.00	14400	18000	15
	Units				See below	V		mcd		deg
	Colour Temperature Range Limits	W3		W4						
	Units	6667	9091	5556	6667	K				
5.0 mm	Units									

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

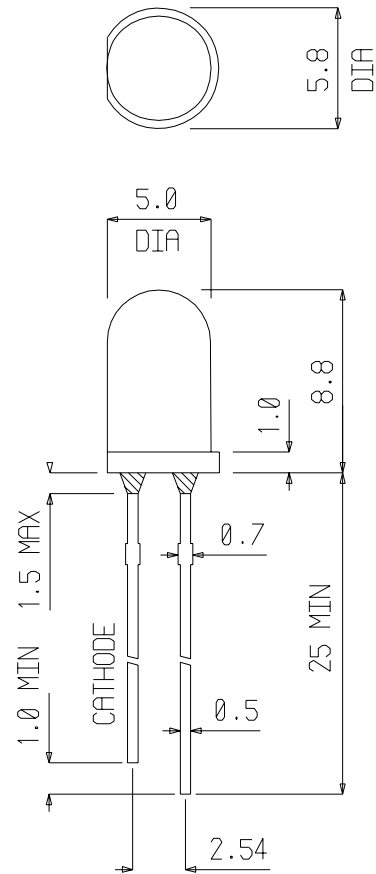
Characteristic	Condition	Symbol	Rating	Units
Pulse Forward Current	Pulse width $\leq 0.1 \text{ msec}$, duty $\leq 1/10$	I_{FP}	100	mA
DC Forward Current		I_F	25	mA
Reverse Voltage	$I_R = 100 \mu\text{A}$	V_R	5	V
Power Dissipation		P_D	100	mW
Operating Temperature		T_{opr}	- 40 to + 95	$^\circ \text{ C}$
Storage Temperature		T_{stg}	- 40 to + 100	$^\circ \text{ C}$
Lead soldering temperature	3.0 mm from body - max 3 seconds		260	$^\circ \text{ C}$

WARNING

 This range of LEDs is produced with die having a high radiant flux. Care must be taken when viewing the product at close range as the light may be intense enough to cause damage to the human eye.

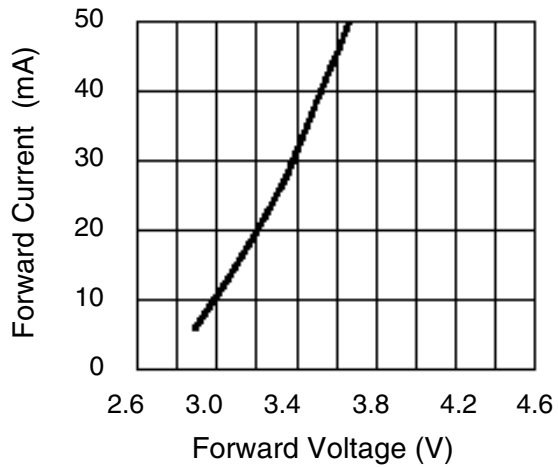
It is the responsibility of the customer to verify the suitability of the product for the application.

Package Outlines

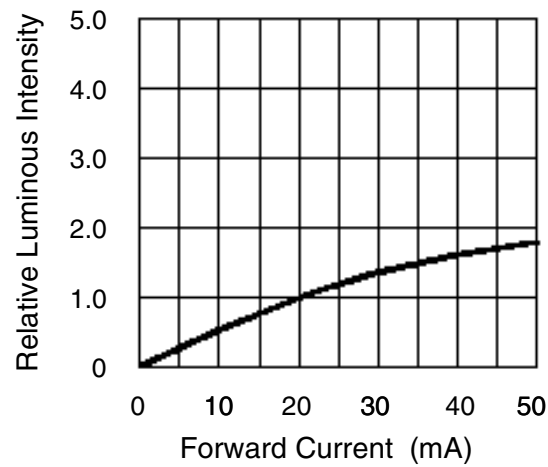


Dimensions in mm Tolerance ± 0.25 mm unless stated

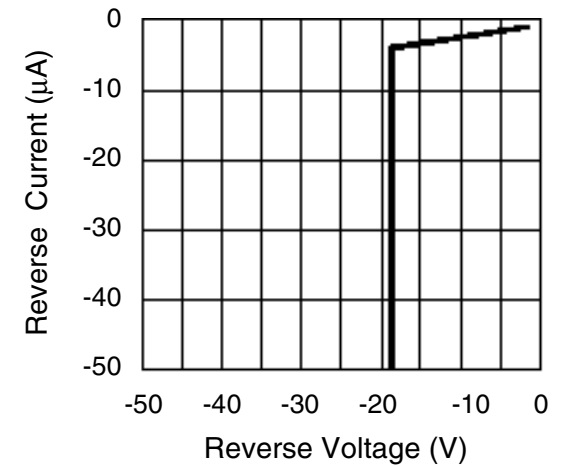
Forward Current Vs Forward Voltage



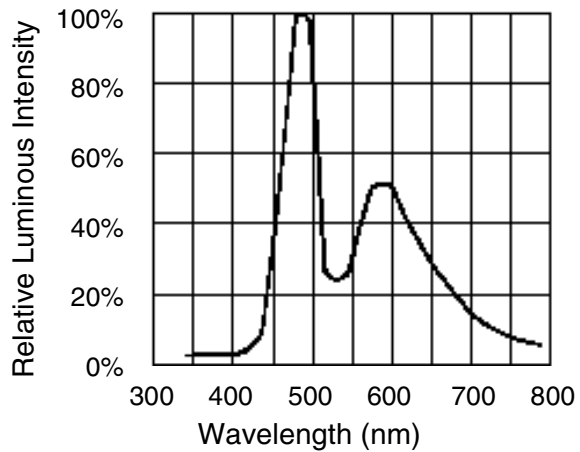
Relative Luminous Intensity Vs Forward Current



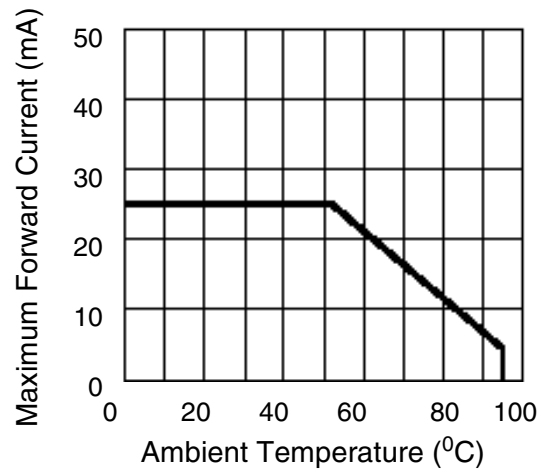
Reverse Current Vs Reverse Voltage



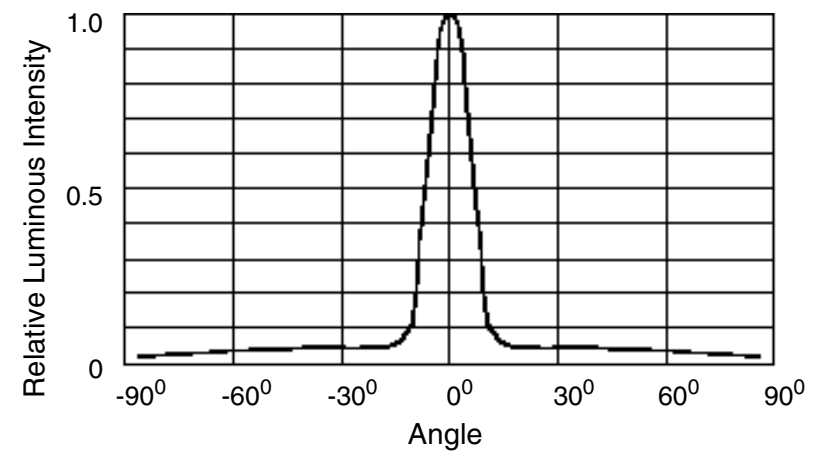
Relative Luminous Intensity Vs Wavelength



Maximum Forward DC Current Vs Ambient Temperature (T_j max=105°C)



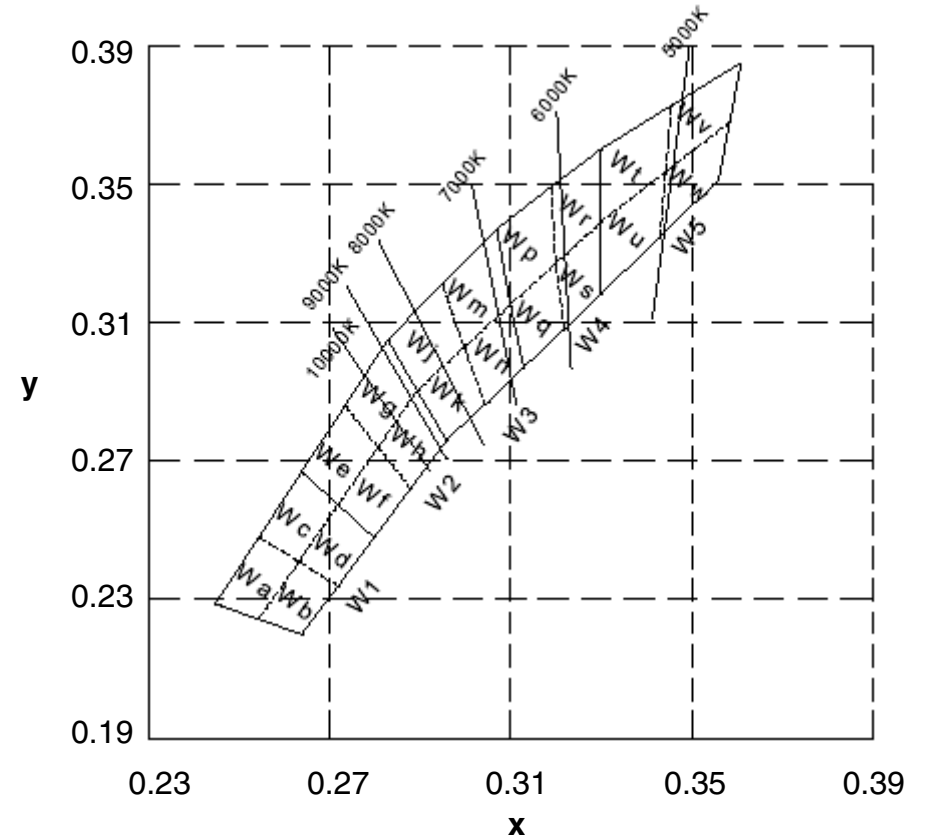
Far Field Pattern 50% Power Angle: 15°



Colour Bin Limit $I_F = 20 \text{ mA}$

Bin Code	Sub-bin	x	y	Bin Code	Sub-bin	x	y
W3	Wj	0.2830	0.3050	W4	Wp	0.3070	0.3370
		0.2950	0.3210			0.3185	0.3485
		0.2998	0.3028			0.3200	0.3270
		0.2895	0.2905			0.3100	0.3150
	Wk	0.2895	0.2905		Wq	0.3100	0.3150
		0.2998	0.3028			0.3200	0.3270
		0.3045	0.2865			0.3215	0.3075
		0.2960	0.2760			0.3130	0.2970
	Wm	0.2950	0.3210		Wr	0.3185	0.3485
		0.3070	0.3370			0.3300	0.3600
		0.3100	0.3150			0.3300	0.3390
		0.2998	0.3028			0.3200	0.3270
	Wn	0.2998	0.3028		Ws	0.3200	0.3270
		0.3100	0.3150			0.3300	0.3390
		0.3130	0.2970			0.3300	0.3180
		0.3045	0.2865			0.3215	0.3075

Measurement Tolerance of colour coordinates ± 0.01



Intensity Bin Limit $I_F = 20 \text{ mA}$

Bin Code	Min. (mcd)	Max. (mcd)
Ab	14400	16800
Ba	16800	20150
Bb	20150	23500
Ca	23500	28200
Cb	28200	32900

Tolerance of measurement of luminous intensity is $\pm 15\%$