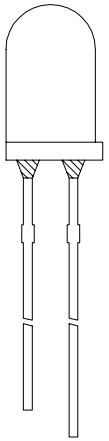
FNL-U500XWCSL Range

5.0 mm Round High Performance LED Lamp

Features:
- High intensity
- Water clear epoxy
- Range of colours
- Standard leads

Available options:
- Flangeless Package

Electro / Optical Characteristics I_F = 20 mA T_a = 25° C

Lamp Package	Part Number	Emitting Colour	Epoxy Type	Die Material	Wavelength		Forward Voltage V_F		Luminous intensity I_V		Viewing ∠ 2θ½
					Peak λ_P	Dominant λ_d	typical	max	min	typical	
	FNL-U500R078WCSL	Red	WC	AlGaInP	632	624	2.00	2.40	-	3600	15
	FNL-U500R2110WCSL	Red	WC	AlGaInP	632	624	2.10	2.50	-	4700	15
	FNL-U500R2112WCSL	Red	WC	AlGaInP	632	624	2.10	2.50	-	6500	15
	FNL-U500O0813WCSL	Orange	WC	AlGaInP	621	615	2.10	2.40	-	5410	15
	FNL-U500O0310WCSL	Orange	WC	AlGaInP	611	605	2.00	2.40	-	3670	15
	FNL-U500O038WCSL	Orange	WC	AlGaInP	611	605	2.00	2.40	-	2620	15
	FNL-U500Y048WCSL	Yellow	WC	AlGaInP	591	589	2.00	2.40	-	3570	15
	FNL-U500Y0410WCSL	Yellow	WC	AlGaInP	591	589	2.00	2.40	-	4640	15
	FNL-U500Y1513WCSL	Yellow	WC	AlGaInP	591	589	2.10	2.50	-	7380	15
	FNL-U500G03WCSL	Green	WC	InGaN/SiC	518	525	3.70	4.20	-	3460	15
	FNL-U500G16WCSL	Green	WC	InGaN/SiC	518	527	3.85	4.00	-	7780	15
	FNL-U500G282WCSL	Green	WC	InGaN/GaN	-	525 ± 5	3.30	3.50		10980	15
	FNL-U500G06WCSL	Green	WC	InGaN/SiC	502	505	3.70	4.20	-	4230	15
	FNL-U500G11WCSL	Green	WC	InGaN/SiC	502	505	3.80	4.00	-	7780	15
	FNL-U500G273WCSL	Green	WC	InGaN/GaN	-	505 ± 5	3.30	3.50		9880	15
	FNL-U500B07WCSL	Blue	WC	InGaN/SiC	488	490	3.70	4.20	-	2880	15
	FNL-U500B03WCSL	Blue	WC	InGaN/SiC	468	470	3.70	4.20	-	1380	15
	FNL-U500B12WCSL	Blue	WC	InGaN/SiC	468	470	3.75	4.00	-	2710	15
	FNL-U500B17WCSL	Blue	WC	InGaN/SiC	-	470 ±5	3.50	3.80	-	3660	15
	FNL-U500B06WCSL	Blue	WC	InGaN/SiC	458	460	3.70	4.20	-	1150	15
	FNL-U500B11WCSL	Blue	WC	InGaN/SiC	458	460	3.75	4.00	-	1840	15
	FNL-U500B15WCSL	Blue	WC	InGaN/SiC	-	460 ±5	3.50	3.80	-	2300	15
5.0 mm	Units				nm		V		mcd		deg

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

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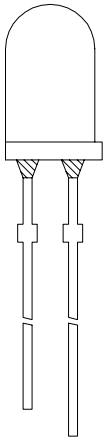
FNL-U500XWCSO Range

5.0 mm Round High Performance LED Lamp - with stand off

Features:
- High intensity
- Water clear epoxy
- Range of colours
- Leads with stand off

Available options:
- Flangeless Package

Electro / Optical Characteristics I_F = 20 mA T_a = 25° C

Lamp Package	Part Number	Emitting Colour	Epoxy Type	Die Material	Wavelength		Forward Voltage V_F		Luminous intensity I_V		Viewing ∠ 2θ½
					Peak λ_P	Dominant λ_d	typical	max	min	typical	
	FNL-U500R078WCSO	Red	WC	AlGaInP	632	624	2.00	2.40	-	3600	15
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	FNL-U500O0813WCSO	Orange	WC	AlGaInP	621	615	2.10	2.40	-	5410	15
	FNL-U500O0310WCSO	Orange	WC	AlGaInP	611	605	2.00	2.40	-	3670	15
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5.0 mm	Units				nm		V		mcd		deg

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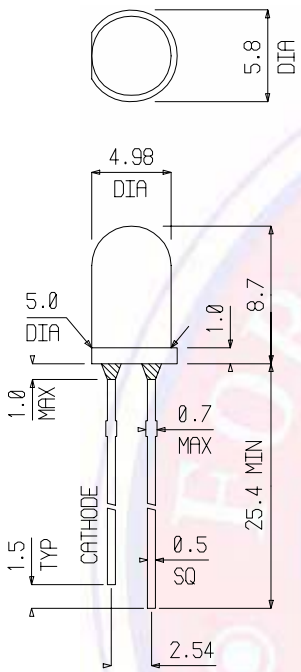
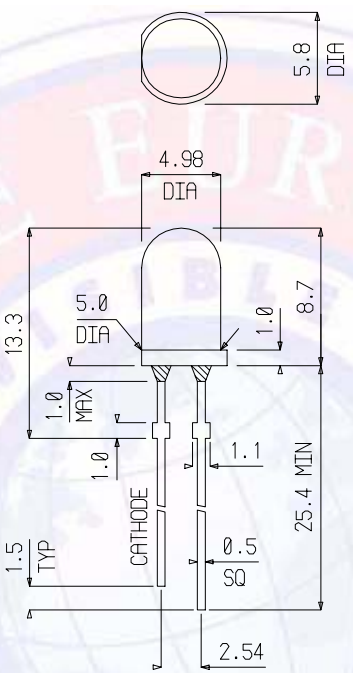
Package Outlines

Dimensions in mm
Tol ± 0.25 mm unless stated

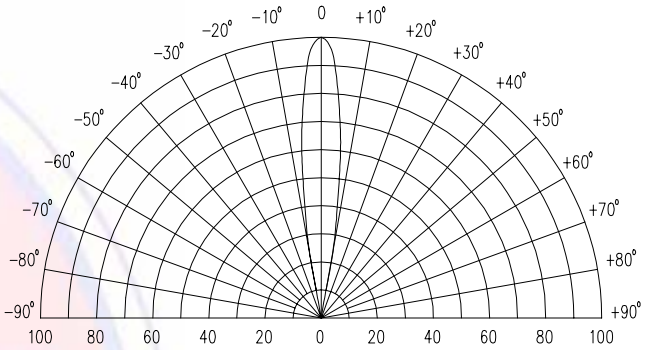
Standard Leads



Leads with stand off



Radiation Diagram $T_a = 25^oC$ $I_F = 20$ mA



Relative angular intensity

Maximum Ratings $T_a = 25°$ C (Derate above 25° C)

Characteristic	Condition	Die	Symbol	Rating	Units
Pulse Forward Current	0.1 duty cycle @ 1KHz	All types	I_{FP}	100	mA
DC Forward Current		AlGaInP	I_F	50	mA
		InGaN/GaN InGaN/SiC	I_F	30	mA
Reverse Voltage	I_R = 10 µA	InGaN/GaN AlGaInP	V_R	10	V
		InGaN/SiC	V_R	5	V
Operating Temperature			T_{opr}	- 20 to + 80	° C
Storage Temperature			T_{stg}	- 20 to + 100	° C
Lead soldering temperature	1.6 mm from body - max. 3 seconds			240	° C

Note:
Industry standard procedures regarding static must be observed when handling product with InGaN die.

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.

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