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T-1 3/4 (5 mm) FULL COLOR LED-LAMP

Onderdeelnummer: L-154A4SURKQBDZGC

Hyper rood
Blauw
Groente

AANDACHT
LET OP VOORZORGSMAATREGELEN
VOOR BEHANDELING
ELEKTROSTATISCH
AFVOER
GEVOELIG
APPARATEN

Functies

Gelijkmatige lichtopbrengst.

Laag energieverbruik.

Betrouwbaarheid met lange levensuur in vaste toestand.

RoHS-conformiteit.

Beschrijving

De Hyper Red-bronkleurapparaten zijn gemaakt met Al

GaInP op GaAs-substraat Light Emitting Diode.

De apparaten met blauwe bronkleur zijn gemaakt met InGaN Light Emitting Diode.

De groene bronkleurapparaten zijn gemaakt met InGaN

op Sapphire Light Emitting Diode.

Statische elektriciteit en spanningspieken beschadigen de LEDS.

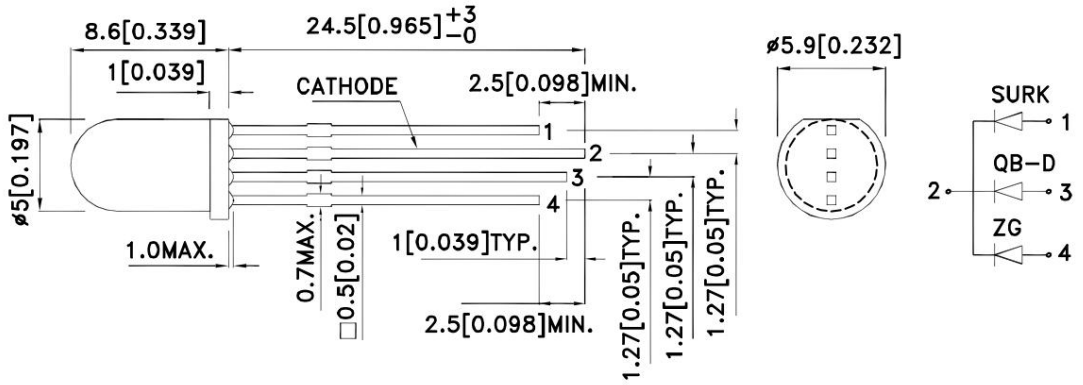
Het wordt aanbevolen om een polsbandje of anti-elektrostatisch te gebruiken

handschoen bij het hanteren van de leds.

Alle apparaten, apparatuur en machines moeten elektrisch zijn

geaard.

pakketafmetingen



Opmerkingen: 1. Alle afmetingen zijn in millimeters (inch).
2. Tolerantie is ± 0,25 (0,01"), tenzij anders vermeld.
3. De afstand tussen de snoeren wordt gemeten waar de snoeren uit de verpakking komen.
4. De specificaties, kenmerken en technische gegevens beschreven in het gegevensblad kunnen zonder voorafgaande kennisgeving worden gewijzigd.

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Selectiegids

onderdeelnr.	Dobbelsteen	Lenstype	Iv (mcd) [2] @ 20mA		bekijken Hoek [1]
			min.	Type.	2ÿ1/2
L-154A4SURKQBDZGC	Hyperrood (AlGaInP)	Glashelder	600	1200	50°
	Blauw (InGaN)		450	800	
	Groen (InGaN)		1000	1700	

Opmerkingen: 1. ÿ1/2 is de hoek vanaf de optische hartlijn waarbij de lichtintensiteit 1/2 is van de optische piekwaarde.
2. Lichtsterkte/lichtstroom: +/-15%.

Elektrische / optische eigenschappen bij TA=25°C

Symbool	Parameter	Apparaat	Type.	Max.	Eenheden	Test voorwaarden
ÿpiek	Piek golflengte	Hyper rood Blauw Groente	650 468 515		nm	ALS=20mA
ÿD [1]	Dominante golflengte	Hyperrood Blauw Groente	630 470 525		nm	ALS=20mA
Dl1/2	Spectraallijn halve breedte	Hyperrood Blauw Groente	28 25 30		nm	ALS=20mA
C	Capaciteit	Hyper rood Blauw Groente	35 100 45		pF	VF=0V;f=1MHz
VF [2]	Voorwaartse spanning	Hyperrood Blauw Groente	1,95 3,3 3,3	2,5 4 4,1	IN	ALS=20mA
EN	Tegenstroom	Hyperrood Blauw Groente		10 50 50	uA	VR=5V

Opmerkingen: 1.Wavelength: +/-1nm.
2. Doorlaatspanning: +/- 0,1 V.

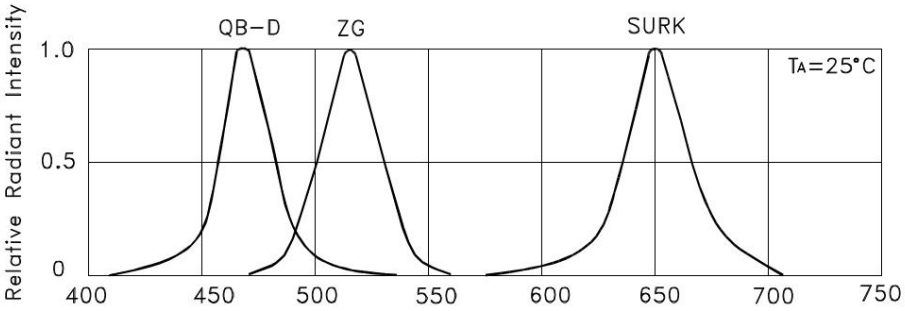
Absolute maximale waarden bij TA=25°C

Parameter	Hyperrood	Blauw	Groente	Eenheden
Vermogensdissipatie	75	120	102,5	mW
DC doorlaatstroom	30	30	25	mA
Piek voorwaartse stroom [1]	185	150	150	mA
Omgekeerde spanning	5			IN
Bedrijfs-/opslagtemperatuur	-40°C tot +85°C			
Loodsoldeertemperatuur [2]	260°C gedurende 3 seconden			
Loodsoldeertemperatuur [3]	260°C gedurende 5 seconden			

Opmerkingen: 1. 1/10 inschakelduur, 0,1 ms pulsduur. 2. 2 mm onder pakketbasis.
3. 5 mm onder pakketbasis.

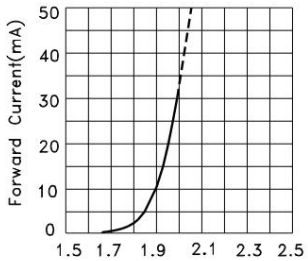
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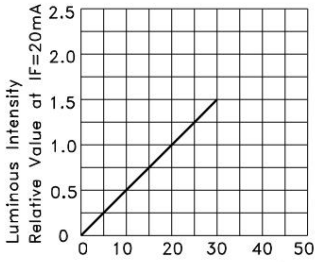


RELATIVE INTENSITY Vs. WAVELENGTH

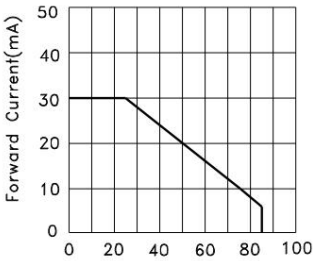
L-154A4SURKQBDZGC
Hyperrood



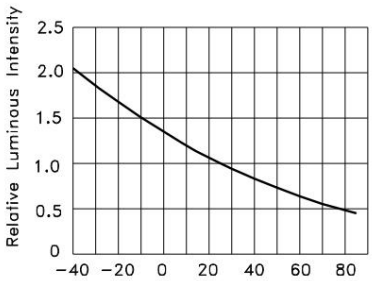
FORWARD CURRENT Vs.
FORWARD VOLTAGE



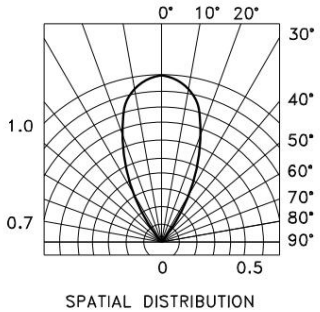
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

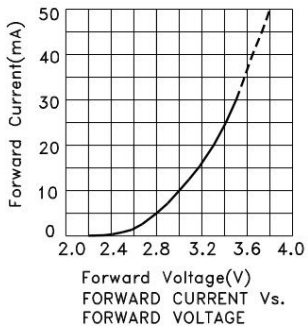


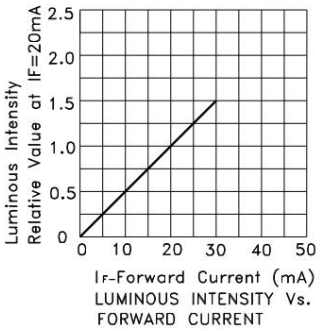
SPATIAL DISTRIBUTION

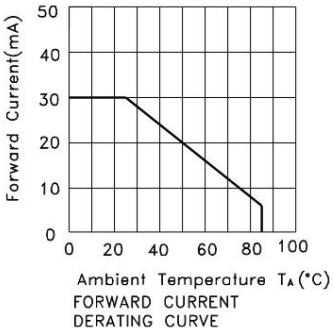
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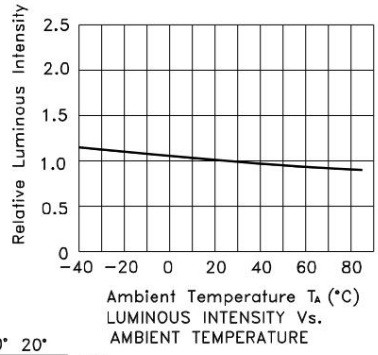
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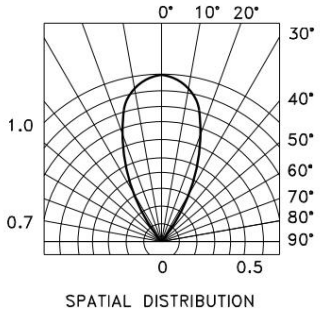
Blauw







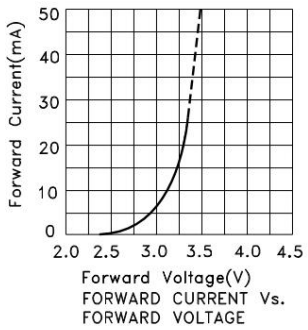


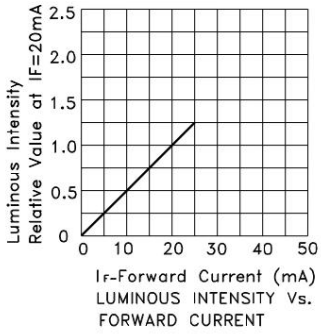


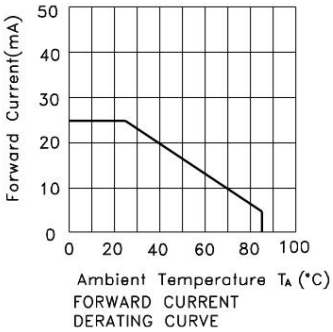
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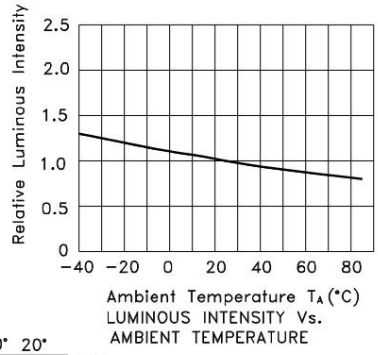
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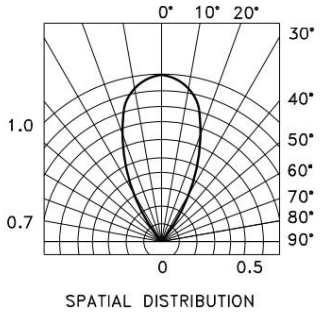
Groente







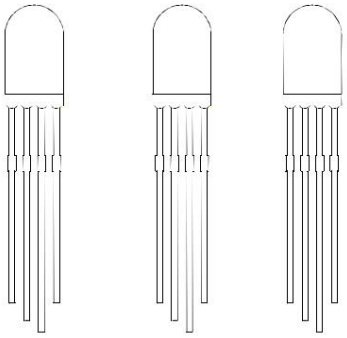


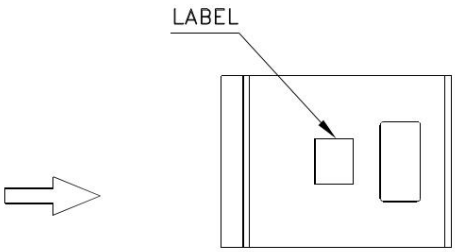


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VERPAKKING & ETIKET SPECIFICATIES **L-154A4SURKQBDZGC**



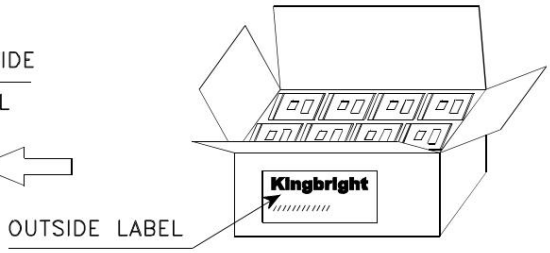


500PCS / BAG

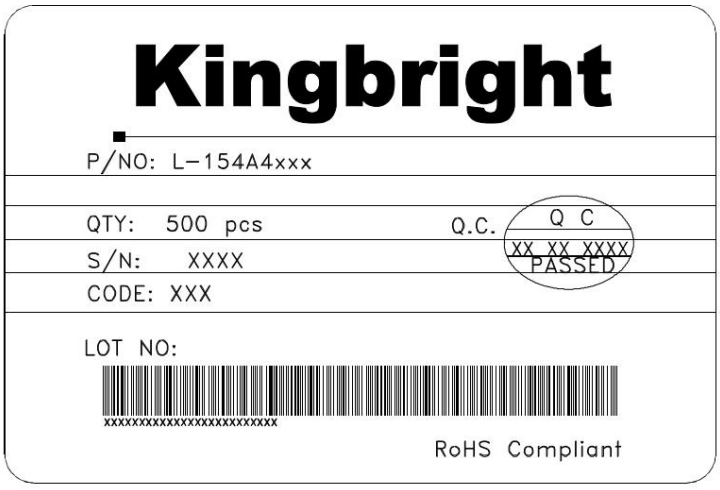


OUTSIDE LABEL

20K / 9# BOX



10K/ 5# BOX

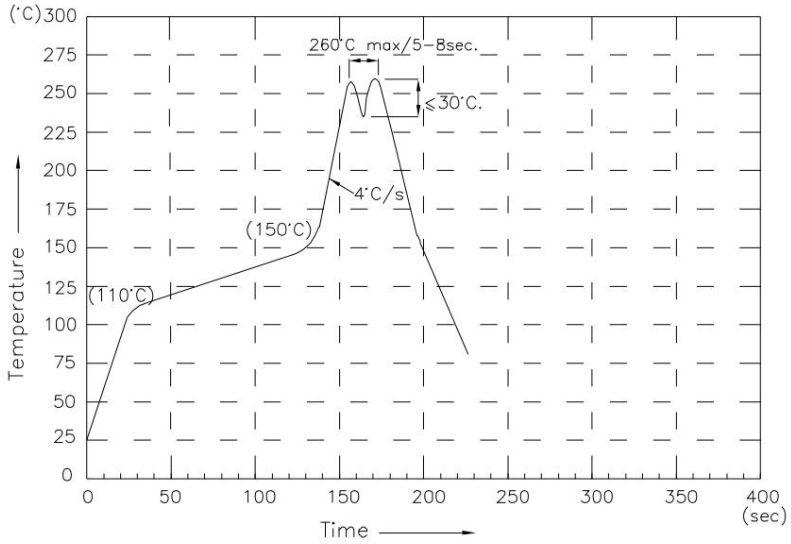


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L-154A4SURKQBDZGC

Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

1.Recommend the wave temperature 245°C~260°C.The maximum soldering temperature should be less than 260°C.

2.Do not apply stress on epoxy resins when temperature is over 85 degree°C.

3.The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).

4.No more than once.

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LED MOUNTING METHOD

1. The lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement. Lead-forming may be required to insure the lead pitch matches the hole pitch. Refer to the figure below for proper lead forming procedures.
(Fig. 1)

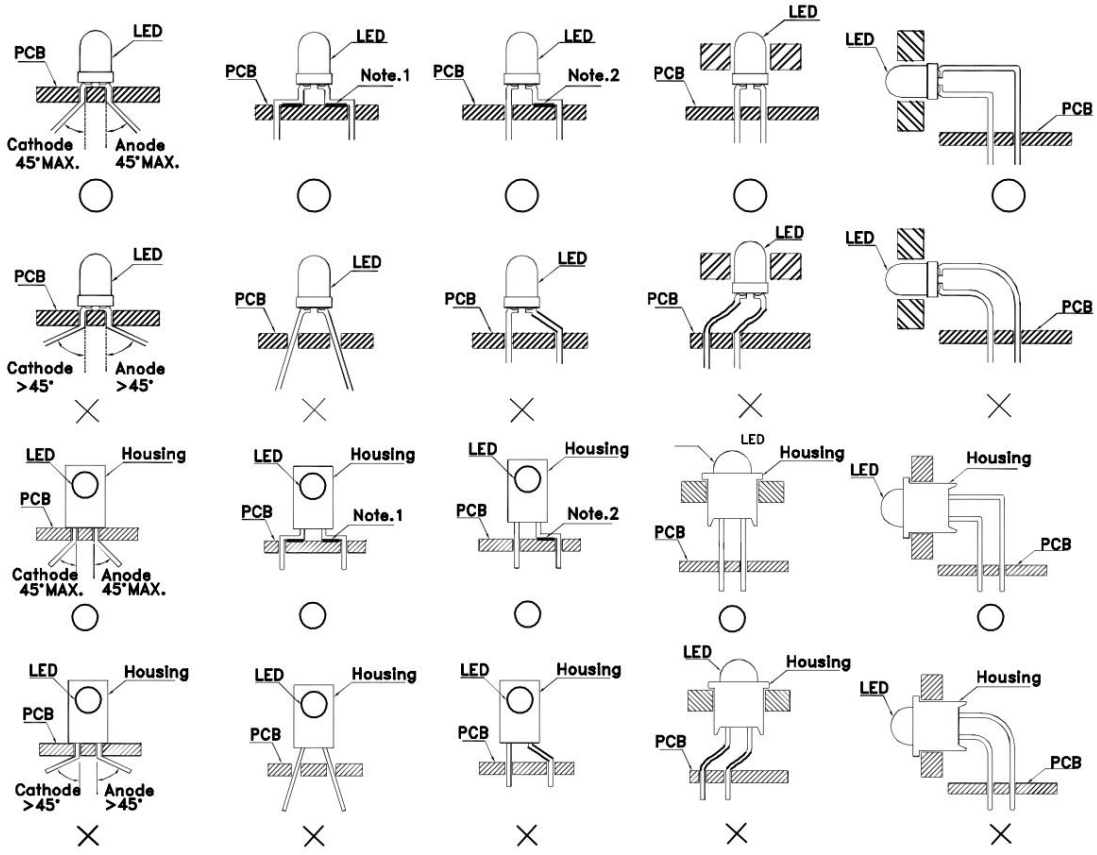


Fig.1

"○" Correct mounting method "×" Incorrect mounting method

Note 1-2 : Do not route PCB trace in the contact area between the leadframe and the PCB to prevent short-circuits.

2. When soldering wire to the LED, use individual heat-shrink tubing to insulate the exposed leads to prevent accidental contact short-circuit. (Fig. 2)
3. Use stand-offs (Fig. 3) or spacers (Fig. 4) to securely position the LED above the PCB.

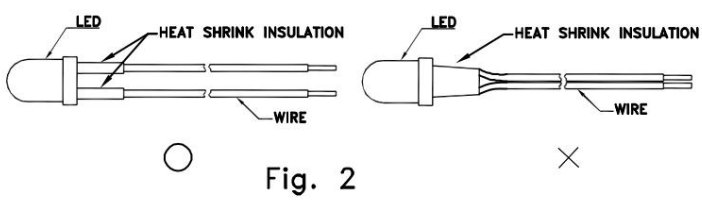


Fig. 2

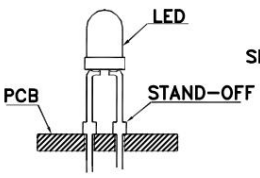


Fig. 3

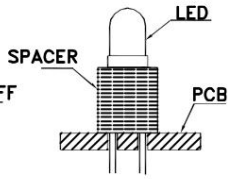


Fig. 4

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LEAD FORMING PROCEDURES

1. Maintain a minimum of 2mm clearance between the base of the LED lens and the first lead bend. (Fig. 5 and 6)

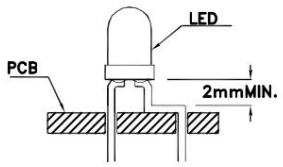


Fig. 5

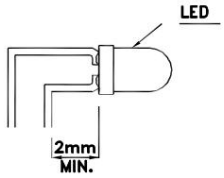


Fig. 6

2. Lead forming or bending must be performed before soldering, never during or after Soldering.
3. Do not stress the LED lens during lead–forming in order to fractures in the lens epoxy and damage the internal structures.
4. During lead forming, use tools or jigs to hold the leads securely so that the bending force will not be transmitted to the LED lens and its internal structures. Do not perform lead forming once the component has been mounted onto the PCB. (Fig. 7)
5. Do not bend the leads more than twice. (Fig. 8)
6. After soldering or other high–temperature assembly, allow the LED to cool down to 50°C before applying outside force (Fig. 9). In general, avoid placing excess force on the LED to avoid damage. For any questions please consult with Kingbright representative for proper handling procedures.

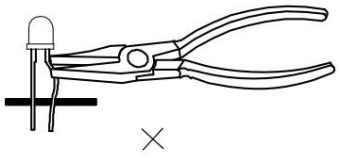


Fig. 7

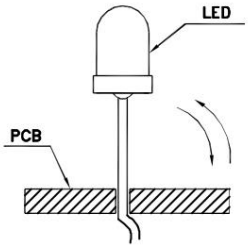


Fig. 8

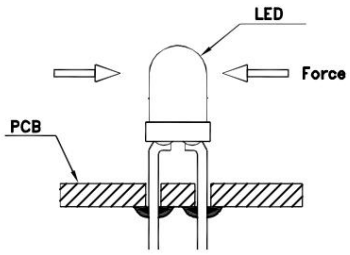


Fig. 9

7. No stress shall be applied on the LED during soldering to prevent damage.

