

BL0307-50-44 52 mm LED Cluster



DESCRIPTIONS

- The Super Bright Red source color devices are Made with Gallium Aluminum Arsenide Red Light Emitting Diode
- Electrostatic discharge and power surge could damage the LEDs
- It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs
- All devices, equipments and machineries must be electrically grounded

FEATURES

- Waterproof construction
- Suitable for outdoor applications, signboard or message board, etc
- RoHs compliant

APPLICATIONS

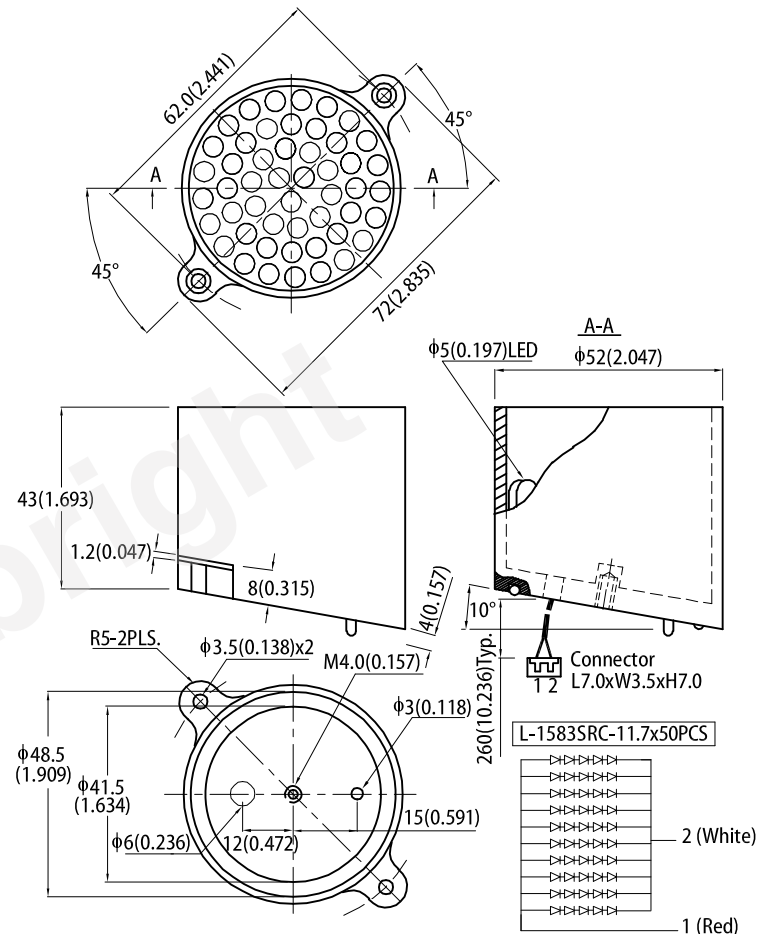
- Status indicator
- Illuminator
- Signage applications
- Decorative and entertainment lighting
- Commercial and residential architectural lighting

ATTENTION

Observe precautions for handling electrostatic discharge sensitive devices



PACKAGE DIMENSIONS



ABSOLUTE MAXIMUM RATINGS at $T_A=25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	3750	mW
DC Forward Current	I_F	300	mA
Operating Temperature	T_{op}	-40 to +70	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +85	$^\circ\text{C}$
Reverse Voltage	V_R	5	V

Note:
1. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.

ELECTRICAL / OPTICAL CHARACTERISTICS at $T_A=25^{\circ}\text{C}$

Parameter	Symbol	Emitting Color	Value			Unit
			Min.	Typ.	Max.	
Luminous Intensity $I_F = 200\text{mA}$	I_V	Super Bright Red	15000	30000	-	mcd
			*5000	*10000	-	
Viewing Angle	2 θ 1/2	Super Bright Red	-	40	-	deg
Forward Voltage $I_F = 200\text{mA}$	V_F	Super Bright Red	-	9.3	12.5	V
Peak Wavelength $I_F = 200\text{mA}$	λ_{peak}	Super Bright Red	-	655	-	nm
Dominant Wavelength $I_F = 200\text{mA}$	λ_{dom}	Super Bright Red	-	640	-	nm
Spectral Line Half-width $I_F = 200\text{mA}$	$\Delta\lambda$ 1/2	Super Bright Red	-	20	-	nm
Reverse Current ($V_R = 5\text{V}$)	I_R	Super Bright Red	-	-	100	μA

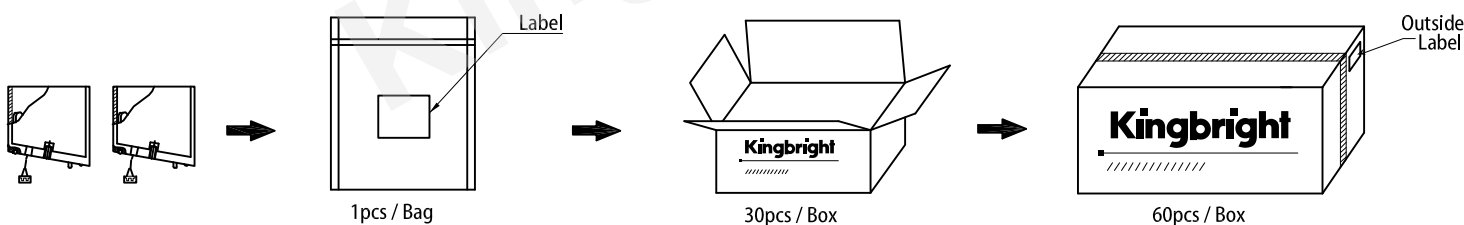
Notes:

* Luminous intensity value is traceable to CIE127-2007 standards.

1. Wavelength value is traceable to CIE127-2007 standards.

2. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

PACKING & LABEL SPECIFICATIONS



Kingbright XXXXXXXXXXX-XXXX

PINO: XXXXXXXX

QTY: XXXXpcs
S/N: XXXX
CODE: XXXX
COUNTRY: CN QC DATE: XXX XX XXXX PASSED
LOT NO:

XXXXXXXXXXXX-XXXX

1 RoHS Compliant

PRECAUTIONARY NOTES

- The information included in this document reflects representative usage scenarios and is intended for technical reference only.
- The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
- When using the products referenced in this document, please make sure the product is being operated within the environmental and electrical limits specified in the datasheet. If customer usage exceeds the specified limits, Kingbright will not be responsible for any subsequent issues.
- The information in this document applies to typical usage in consumer electronics applications. If customer's application has special reliability requirements or have life-threatening liabilities, such as automotive or medical usage, please consult with Kingbright representative for further assistance.
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