



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



PRELIMINARY SPEC

Part Number: AAD1-9090QB11ZC/3-S

Blue



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Features

- Super high flux output and high luminance.
- Designed for high current operation.
- Low thermal resistance.
- Low voltage DC operated.
- Superior ESD protection.
- Not reflow compatible.
- The component is internally protected with silicone gel.
- RoHS compliant.

Application Note

Static electricity and surge damage the LEDs.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

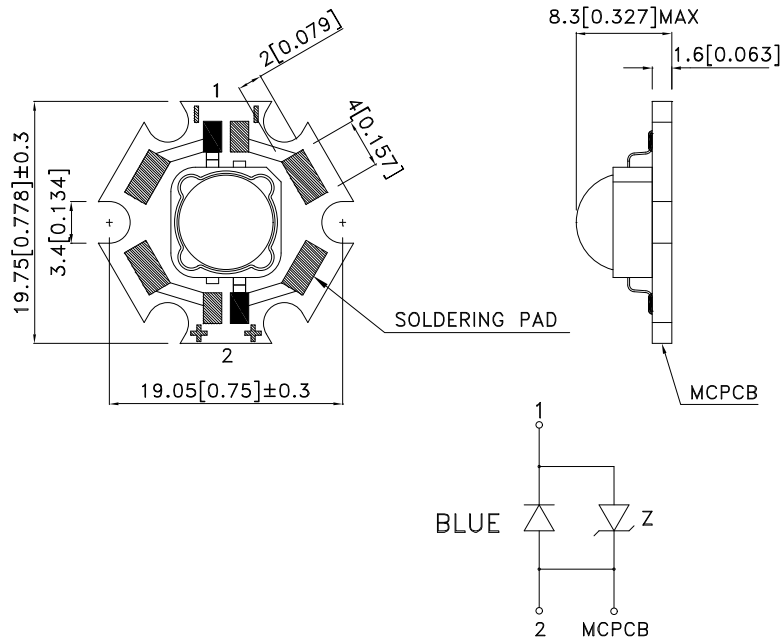
All devices, equipment and machinery must be electrically grounded.



Applications

- traffic signaling.
- backlighting (illuminated advertising, general lighting).
- interior and exterior automotive lighting.
- substitution of micro incandescent lamps.
- portable light source (e.g. bicycle flashlight).
- signal and symbol luminaire for orientation.
- marker lights (e.g. steps, exit ways, etc).
- decorative and entertainment lighting.
- indoor and outdoor commercial and residential architectural lighting.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.



Selection Guide

Part No.	Dice	Lens Type	luminous Intensity [2] Iv (cd)@ 700mA		Φv (lm) [2] @ 700mA		Viewing Angle [1]
			Min.	Typ.	Min.	Typ.	2θ1/2
AAD1-9090QB11ZC/3-S	BLUE (AlInGaN)	WATER CLEAR	6.7	10	20	35.7	100°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity / luminous flux: +/-15%.

Absolute Maximum Ratings at TA=25°C

Parameter	Symbol	Value	Unit
Power dissipation	Pt	3	W
Junction temperature	TJ	110	°C
Operating Temperature	Top	-40 To +100	°C
Storage Temperature	Tstg	-40 To +100	°C
DC Forward Current [1]	IF	700	mA
Peak Forward Current [2]	IFM	1000	mA
Thermal resistance [1]	Rth j-slug	11	°C/W
Electrostatic Discharge Threshold (HBM)		8000	V

Notes:

1. Results from mounting on MCPCB.
2. 1/10 Duty Cycle, 0.1ms Pulse Width.

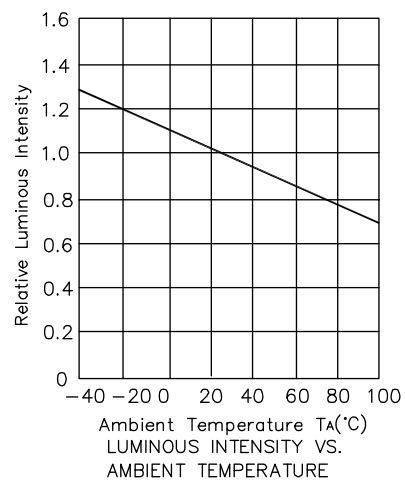
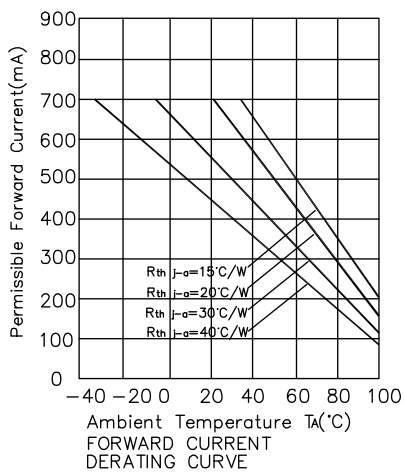
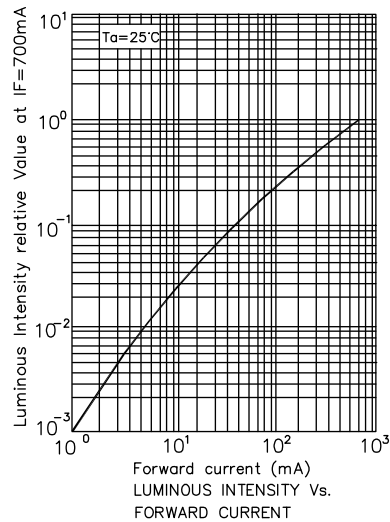
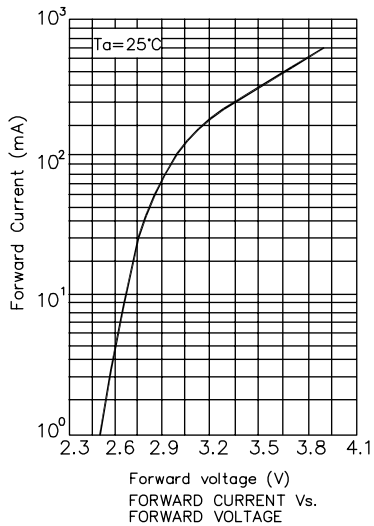
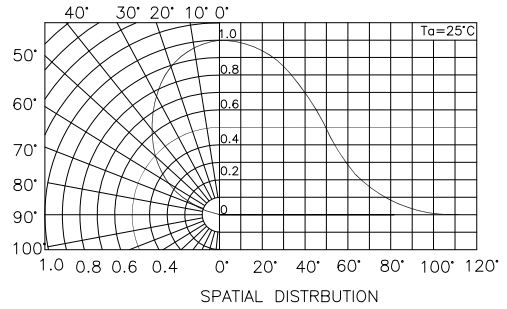
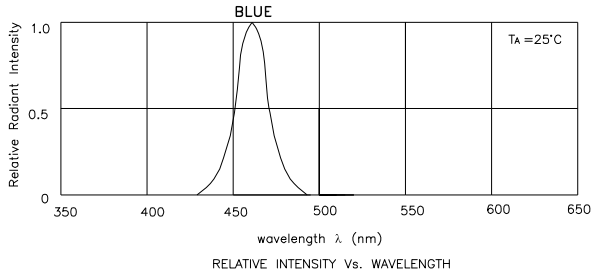
Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Value	Unit
Wavelength at peak emission IF=700mA [Typ.]	λpeak	461	nm
Dominant Wavelength IF=700mA [Typ.]	λdom [1]	460	nm
Spectral bandwidth at 50%ΦREL MAX IF=700mA [Typ.]	Δλ	20	nm
Forward Voltage IF=700mA [Min.]	VF [2]	3.5	V
Forward Voltage IF=700mA [Typ.]		3.9	
Forward Voltage IF=700mA [Max.]		4.3	
Temperature coefficient of λpeak IF=700mA, -10°C ≤ T ≤ 100°C [Typ.]	TCλpeak	0.04	nm/°C
Temperature coefficient of λdom IF=700mA, -10°C ≤ T ≤ 100°C [Typ.]	TCλdom	0.03	nm/°C
Temperature coefficient of VF IF=700mA, -10°C ≤ T ≤ 100°C [Typ.]	TCv	-4.3	mV/°C

Notes:

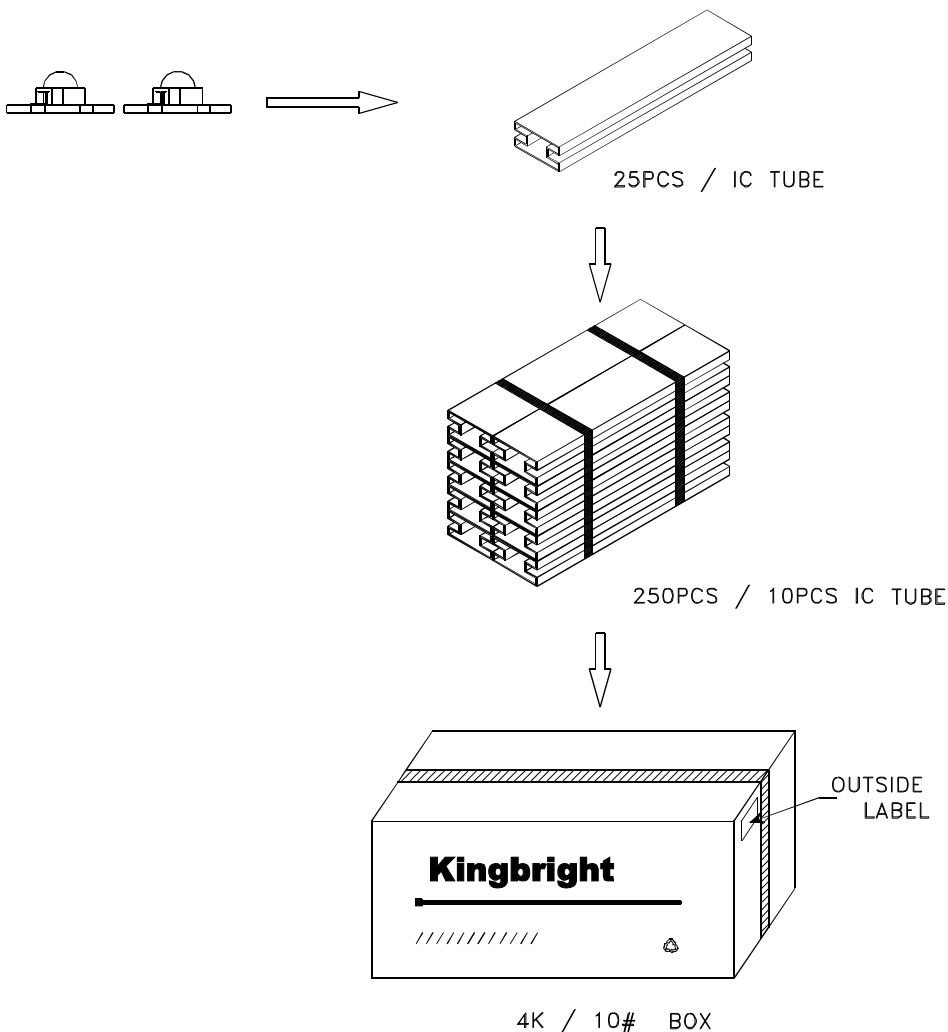
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

AAD1-9090QB11ZC/3-S



PACKING & LABEL SPECIFICATIONS

AAD1-9090QB11ZC/3-S



Kingbright	
P/NO: AAD1-9090XXX	
QTY: 250 pcs	Q.C. Q C XX XX. XXXX PASSED
S/N: XXXX	
CODE: XX	
LOT NO: XXXXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	