

### PRELIMINARY SPEC

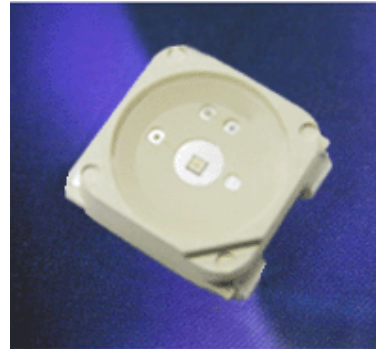
Part Number: AA1010SE28ZC Reddish-Orange



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

### Features

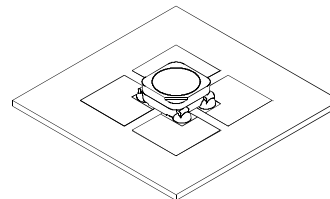
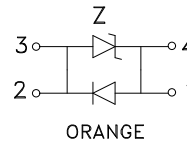
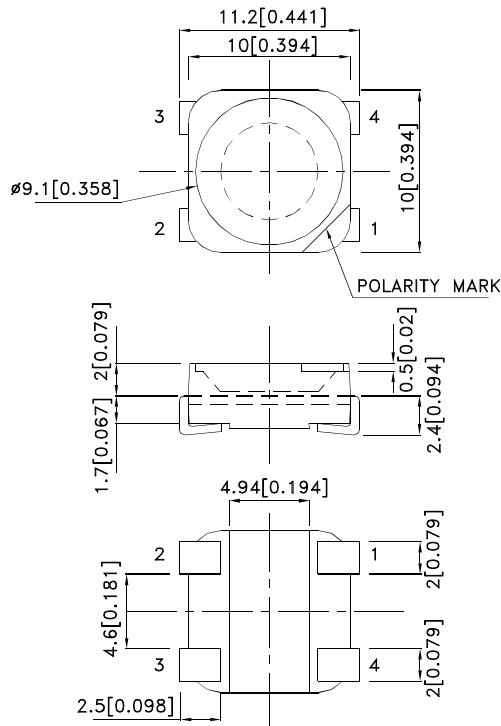
- PLCC-4 package.
- Single color.
- High luminance.
- High power, operating current @350mA.
- Suitable for all SMT assembly methods.
- Package : 500pcs / reel.
- Moisture sensitivity level : level 4.
- Patent pending.
- RoHS compliant.



### 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.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



## Selection Guide

Part No.	Dice	Lens Type	luminous Intensity [2] Iv(cd)@ 350mA		Φv (lm) [2] @ 350mA		Viewing Angle [1]
			Min.	Typ.	Min.	Typ.	
AA1010SE28ZC	Reddish-Orange (AlGaInP)	WATER CLEAR	7.5	10	18	27	120°

Notes:

- 01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
- Luminous intensity / luminous Flux: +/-15%.

## Absolute Maximum Ratings at TA=25°C

Parameter	Symbol	Value	Unit
Power dissipation	Pt	1.05	W
Junction temperature	Tj	110	°C
Operating Temperature	Top	-40 To +85	°C
Storage Temperature	Tstg	-40 To +85	°C
DC Forward Current [1]	If	350	mA
Peak Forward Current [2]	IfM	500	mA
Thermal resistance [1]	Rth	60	°C/W

Notes:

- Results from mounting on PC board FR4(pad size≥100mm<sup>2</sup> per pad), mounted on pc board-metal core PCB is recommend for lowest thermal Resistance.
- 1/10 Duty Cycle, 0.1ms Pulse Width.

## Electrical / Optical Characteristics at TA=25°C

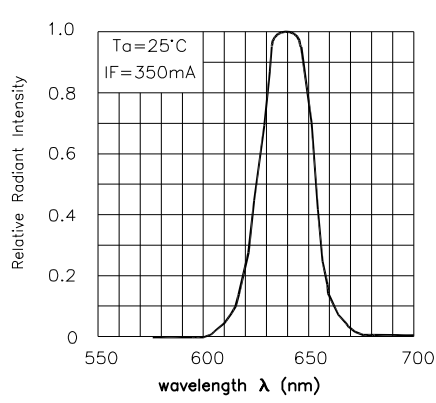
Parameter	Symbol	Value	Unit
Wavelength at peak emission If=350mA [Typ.]	λpeak	640	nm
Dominant Wavelength If=350mA [Typ.]	λDom [1]	625	nm
Spectral bandwidth at 50%ΦREL MAX If=350mA [Typ.]	Δλ	30	nm
Forward Voltage If=350mA [Min.]	VF [2]	2.0	V
Forward Voltage If=350mA [Typ.]		2.5	
Forward Voltage If=350mA [Max.]		3.0	
Temperature coefficient of λpeak If=350mA, -10°C≤T≤100°C [Typ.]	TCλpeak	0.14	nm/°C
Temperature coefficient of λdom If=350mA, -10°C≤T≤100°C [Typ.]	TCλdom	0.12	nm/°C
Temperature coefficient of VF If=350mA, -10°C≤T≤100°C [Typ.]	TCV	-3.0	mV/°C

Notes:

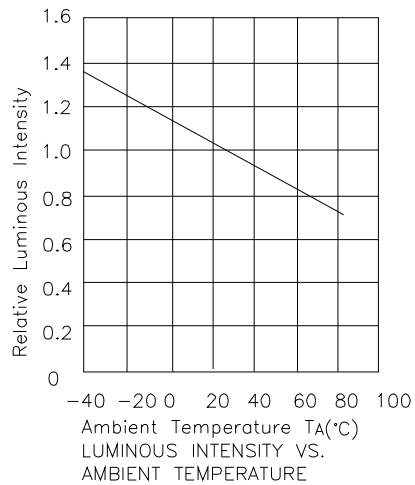
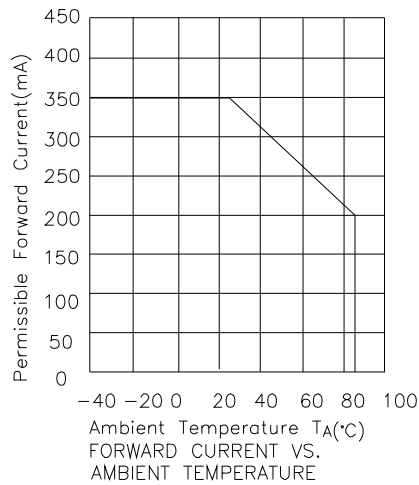
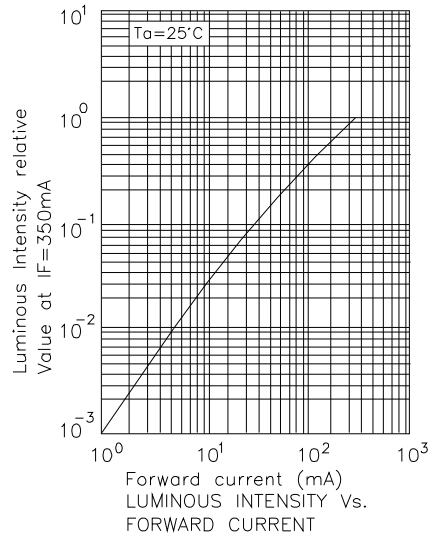
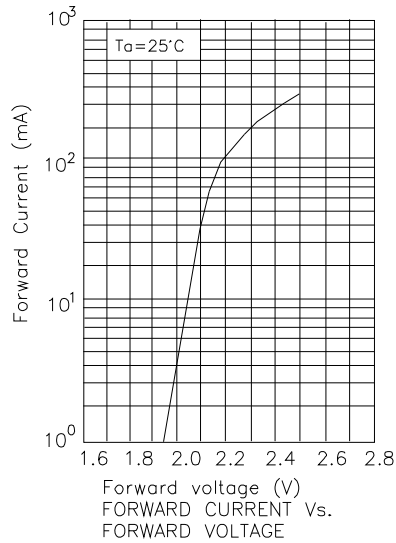
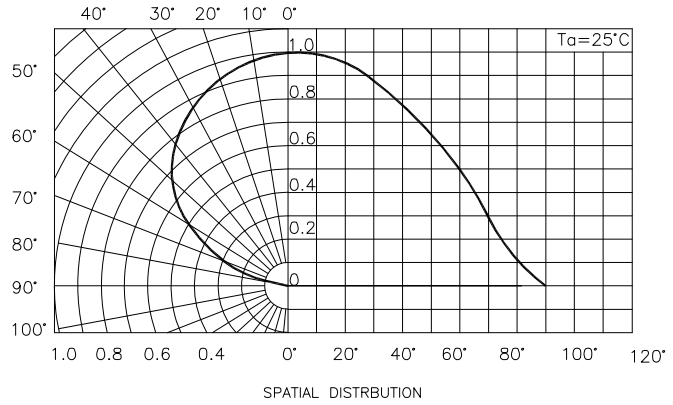
- Wavelength: +/-1nm.
- Forward Voltage: +/-0.1V.

# Kingbright

## AA1010SE28ZC



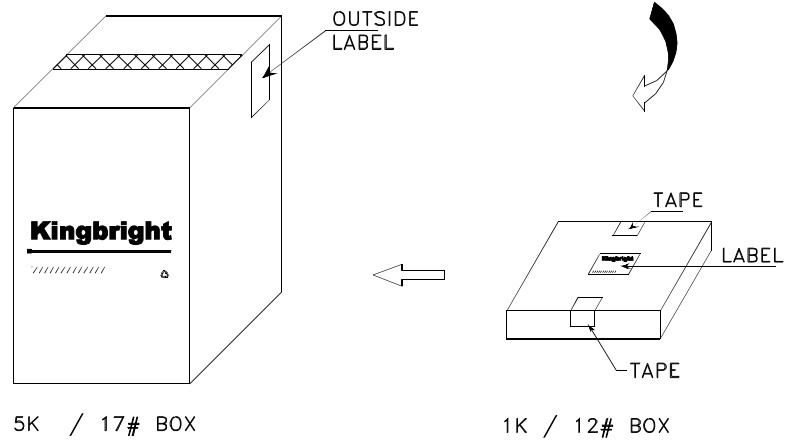
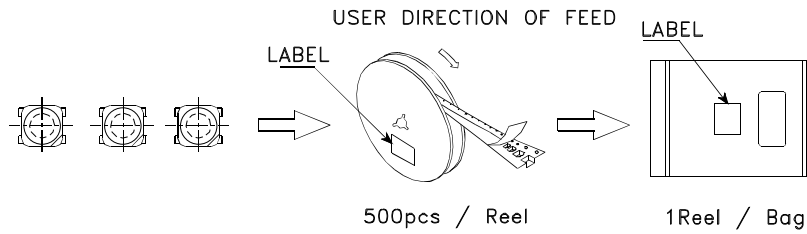
RELATIVE INTENSITY Vs. WAVELENGTH






**PACKING & LABEL SPECIFICATIONS**

**AA1010SE28ZC**



<h1>Kingbright</h1>	
P/NO: AA1010XXX	
QTY: 500 pcs	Q.C. <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">Q C xx xx xxxx PASSED</span>
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	