

PRELIMINARY SPEC

Part Number : AA1010SEC28 Reddish-Orange

Features

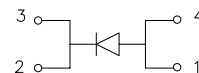
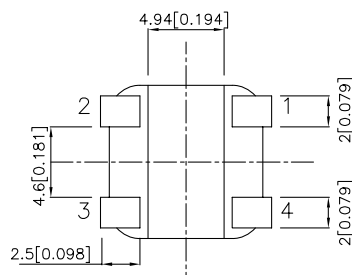
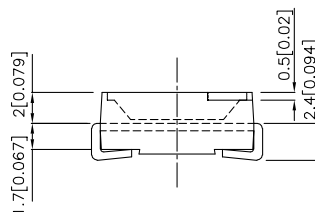
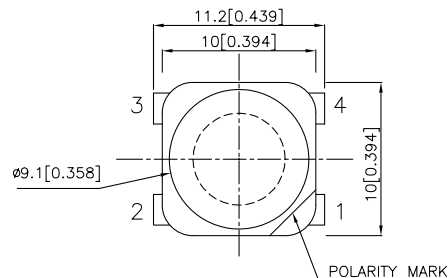
- PLCC-4 PACKAGE.
- SINGLE COLOR.
- HIGH LUMINANCE.
- HIGH POWER, OPERATING CURRENT @350mA.
- SUITABLE FOR ALL SMT ASSEMBLY METHODS.
- PACKAGE : 500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- PATENT PENDING.
- RoHS COMPLIANT.



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.

Selection Guide

Part No.	Dice	Lens Type	luminous Intensity Iv(cd)@ 350 mA [2]		Φ_v (lm) @ 350mA [2]		Viewing Angle [1]
			Min.	Typ.	Min.	Typ.	2 θ 1/2
AA1010SEC28	Reddish-Orange (InGaAlP)	WATER CLEAR	16	32	10	20	120°

Notes:

1. θ 1/2 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	1.2	W
Reverse Voltage	VR	5	V
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:

1. Results from mounting on PC board FR4(pad size $\geq$ 100mm² per pad), mounted on pc board-metal core PCB is recommend for lowest thermal Resistance.
2. 1/10 Duty Cycle, 0.1ms Pulse Width.

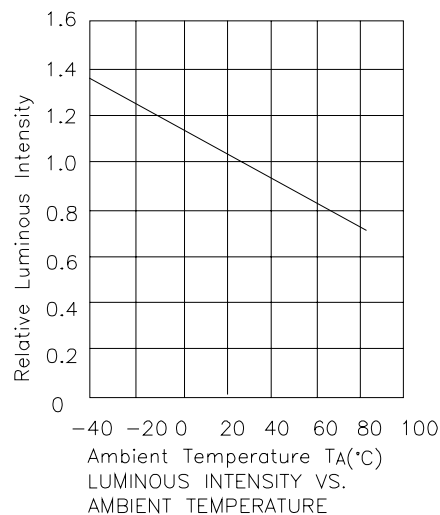
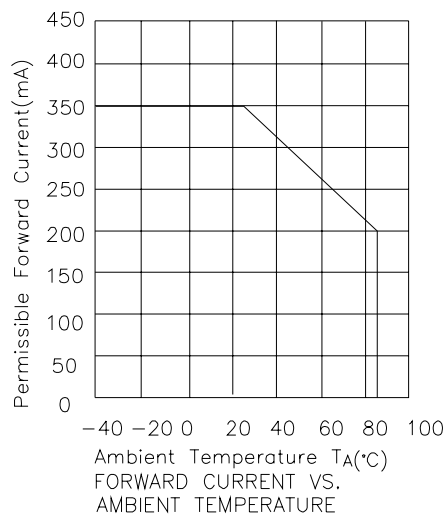
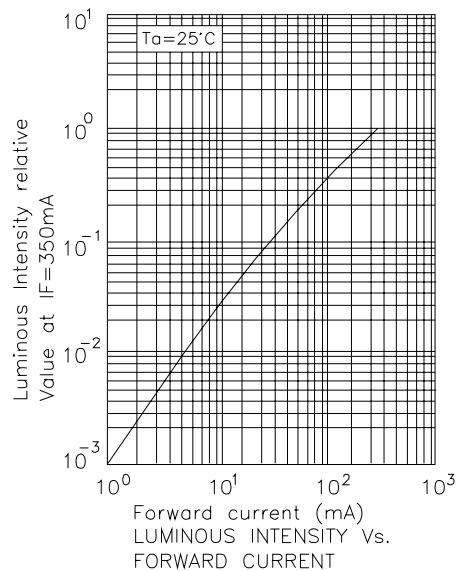
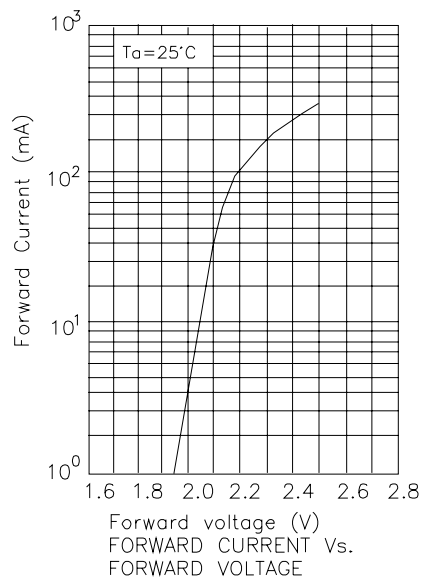
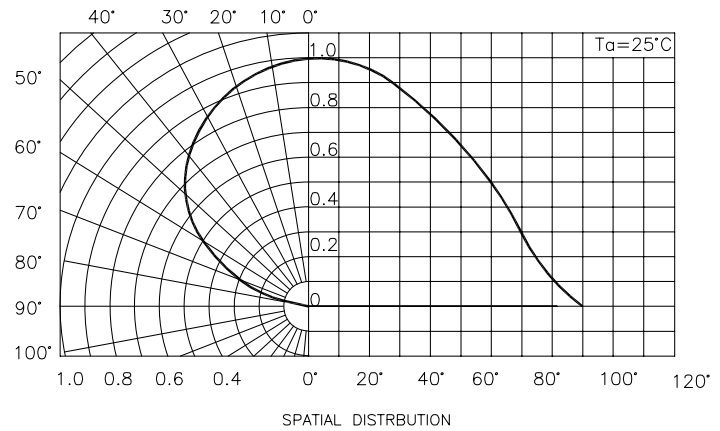
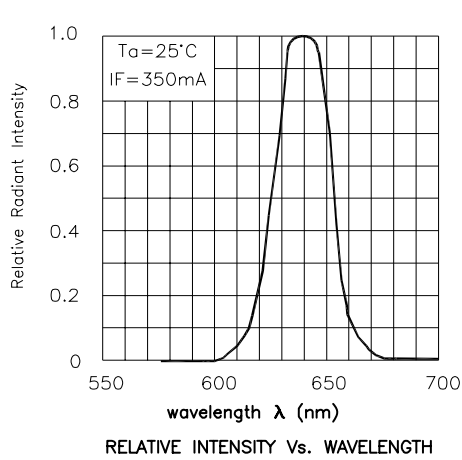
Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Value	Unit
Wavelength at peak emission IF=350mA [Typ.]	λ_{peak}	640	nm
Dominant Wavelength IF=350mA [Typ.]	λ_{Dom} [1]	625	nm
Spectral bandwidth at 50% $\Phi_{REL MAX}$ IF=350mA [Typ.]	$\Delta\lambda$	30	nm
Viewing angle at 50% Φ_v [Typ.]	θ	120	°
Forward Voltage IF=350mA [Min.]	VF [2]	2.0	V
Forward Voltage IF=350mA [Typ.]		2.5	
Forward Voltage IF=350mA [Max.]		3.0	
Reverse Current (VR=5V) [Max.]	IR	10	μ A
Temperature coefficient of λ_{peak} IF=350mA, -10°C $\leq$ T $\leq$ 100°C [Typ.]	TC λ_{peak}	0.14	nm/°C
Temperature coefficient of λ_{dom} IF=350mA, -10°C $\leq$ T $\leq$ 100°C [Typ.]	TC λ_{dom}	0.12	nm/°C
Temperature coefficient of VF IF=350mA, -10°C $\leq$ T $\leq$ 100°C [Typ.]	TCv	-3.0	mV/°C

Notes:

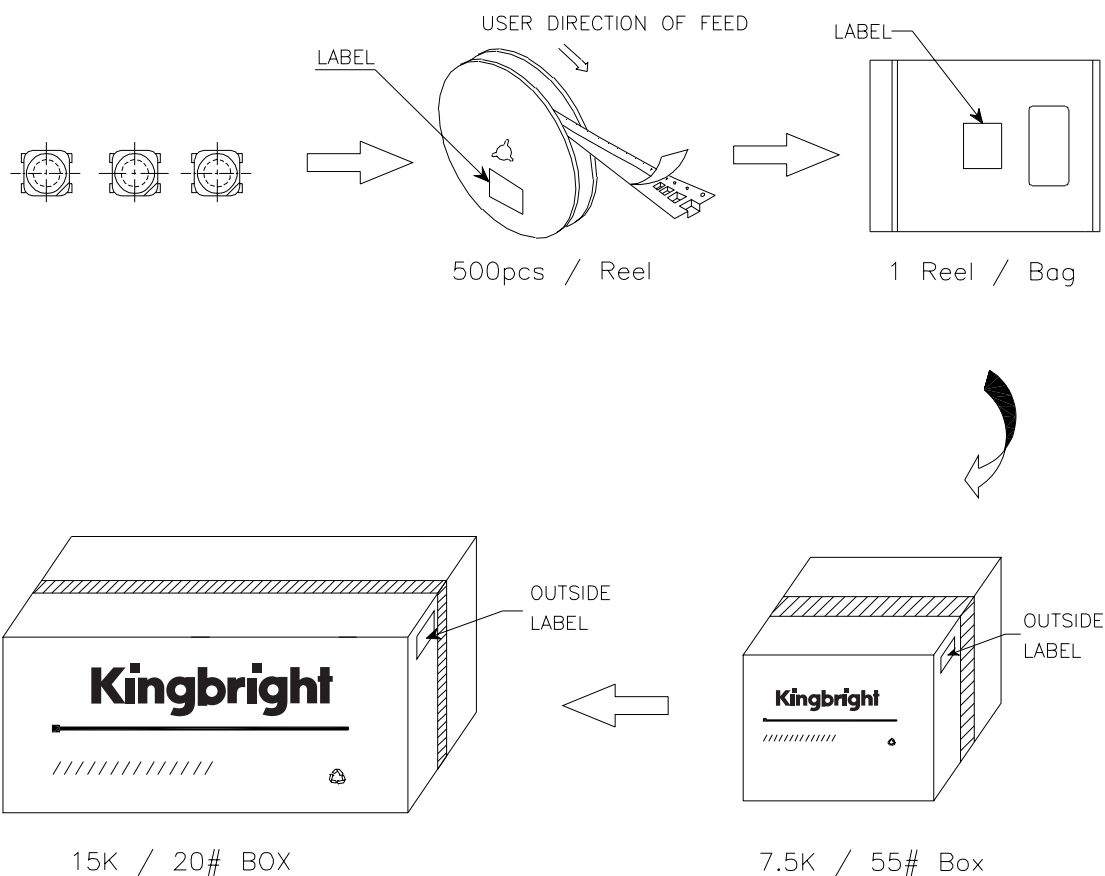
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

AA1010SEC28



PACKING & LABEL SPECIFICATIONS

AA1010SEC28



Kingbright		
P/NO: AA1010XXX		
QTY: 500 pcs	Q.C.	Q C
S/N: XXXX		xx xx xxxx
CODE: XXX		PASSED
LOT NO:		Date
		
RoHS Compliant		