ELECTRICAL / OPTICAL CHARACTERISTICS at T_A=25°C

Parameter	Symbol	Emitting Color	Value		Unit
			Typ.	Max.	
Wavelength at Peak Emission I_F = 20mA	λ_{peak}	Super Bright Orange	610	-	nm
Dominant Wavelength I_F = 20mA	λ_{dom} [1]	Super Bright Orange	605	-	nm
Spectral Bandwidth at 50% Φ REL MAX I_F = 20mA	$\Delta\lambda$	Super Bright Orange	29	-	nm
Capacitance	C	Super Bright Orange	15	-	pF
Forward Voltage I_F = 20mA	V_F [2]	Super Bright Orange	2.1	2.5	V
Reverse Current (V_R = 5V)	I_R	Super Bright Orange	-	10	μA
Temperature Coefficient of λ_{peak} I_F = 20mA, -10°C $\leq$ T $\leq$ 85°C	$TC_{\lambda peak}$	Super Bright Orange	0.13	-	nm/°C
Temperature Coefficient of λ_{dom} I_F = 20mA, -10°C $\leq$ T $\leq$ 85°C	$TC_{\lambda dom}$	Super Bright Orange	0.06	-	nm/°C
Temperature Coefficient of V_F I_F = 20mA, -10°C $\leq$ T $\leq$ 85°C	TC_V	Super Bright Orange	-1.9	-	mV/°C

Notes:
1. The dominant wavelength (λd) above is the setup value of the sorting machine. (Tolerance λd : ±1nm.)
2. Forward voltage: ±0.1V.
3. Wavelength value is traceable to CIE127-2007 standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

ABSOLUTE MAXIMUM RATINGS at T_A=25°C

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	75	mW
Reverse Voltage	V_R	5	V
Junction Temperature	T_j	115	°C
Operating Temperature	T_{op}	-40 to +85	°C
Storage Temperature	T_{stg}	-40 to +85	°C
DC Forward Current	I_F	30	mA
Peak Forward Current	I_{FM} [1]	195	mA
Electrostatic Discharge Threshold (HBM)	-	3000	V
Thermal Resistance (Junction / Ambient)	$R_{th\ JA}$ [2]	680	°C/W
Thermal Resistance (Junction / Solder point)	$R_{th\ JS}$ [2]	500	°C/W

Notes:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. $R_{th\ JA}$,$R_{th\ JS}$ Results from mounting on PC board FR4 (pad size ≥ 16 mm^2 per pad).
3. 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.

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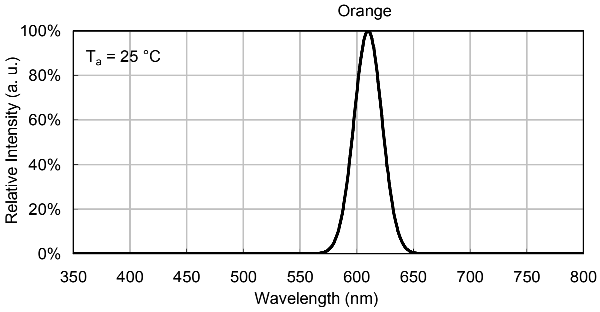
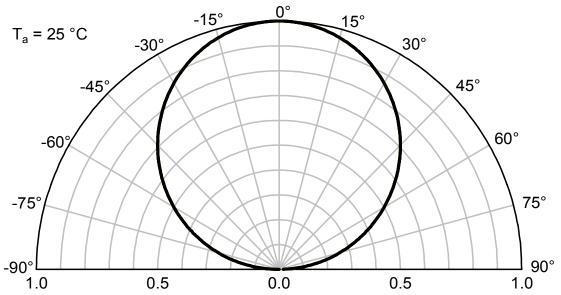
TECHNICAL DATA

RELATIVE INTENSITY vs. WAVELENGTH

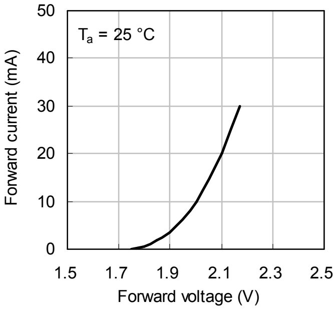


SPATIAL DISTRIBUTION

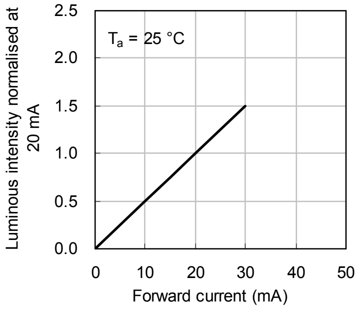


SUPER BRIGHT ORANGE

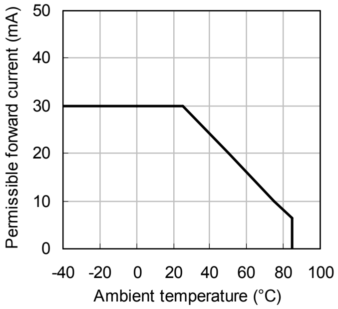
Forward Current vs.
Forward Voltage



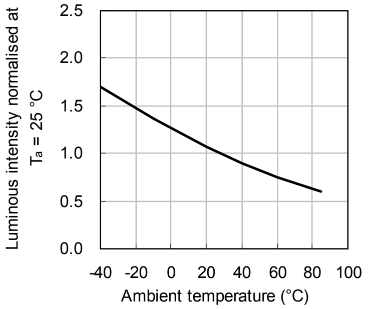
Luminous Intensity vs.
Forward Current



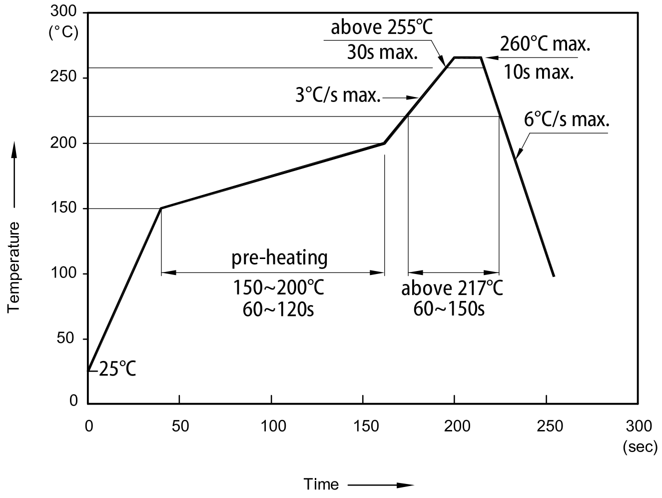
Forward Current Derating Curve



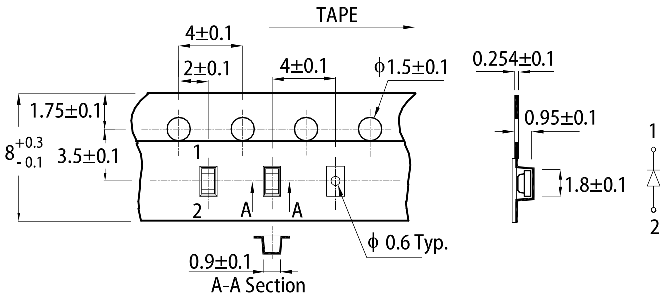
Luminous Intensity vs.
Ambient Temperature



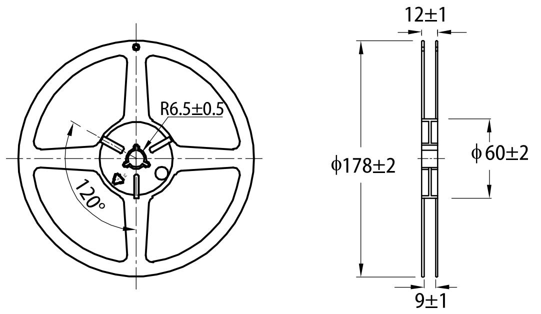
REFLOW SOLDERING PROFILE for LEAD-FREE SMD PROCESS



TAPE SPECIFICATIONS (units : mm)



REEL DIMENSION (units : mm)



Notes:
1. *Don't cause stress to the LEDs while it is exposed to high temperature.*
2. *The maximum number of reflow soldering passes is 2 times.*
3. *Reflow soldering is recommended. Other soldering methods are not recommended as they might cause damage to the product.*

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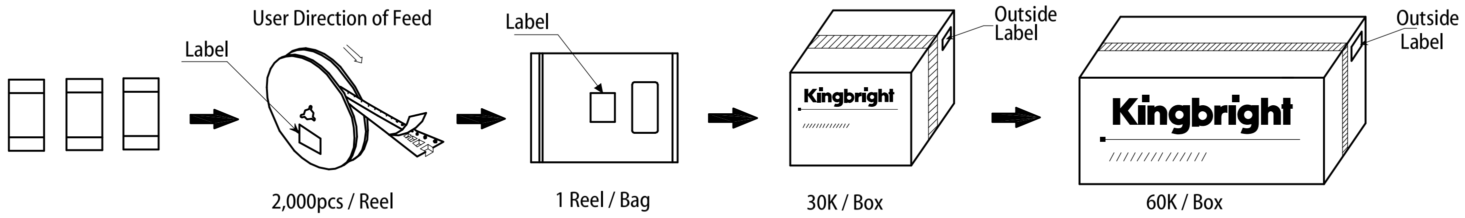
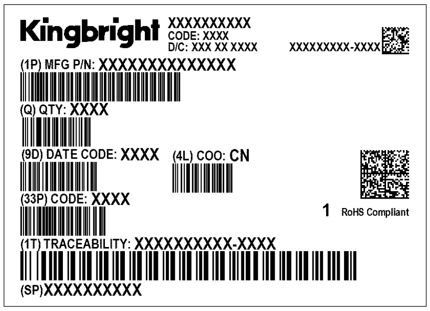
PACKING & LABEL SPECIFICATIONS

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D/C: XXX XX XXXX
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(Q) QTY: XXXX
(9D) DATE CODE: XXXX
(4L) COO: CN
(33P) CODE: XXXX
1 RoHS Compliant
(1T) TRACEABILITY: XXXXXXXXXX-XXXX
(SP)XXXXXXXXXX

PRECAUTIONARY NOTES

1. The information included in this document reflects representative usage scenarios and is intended for technical reference only.
2. 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.
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