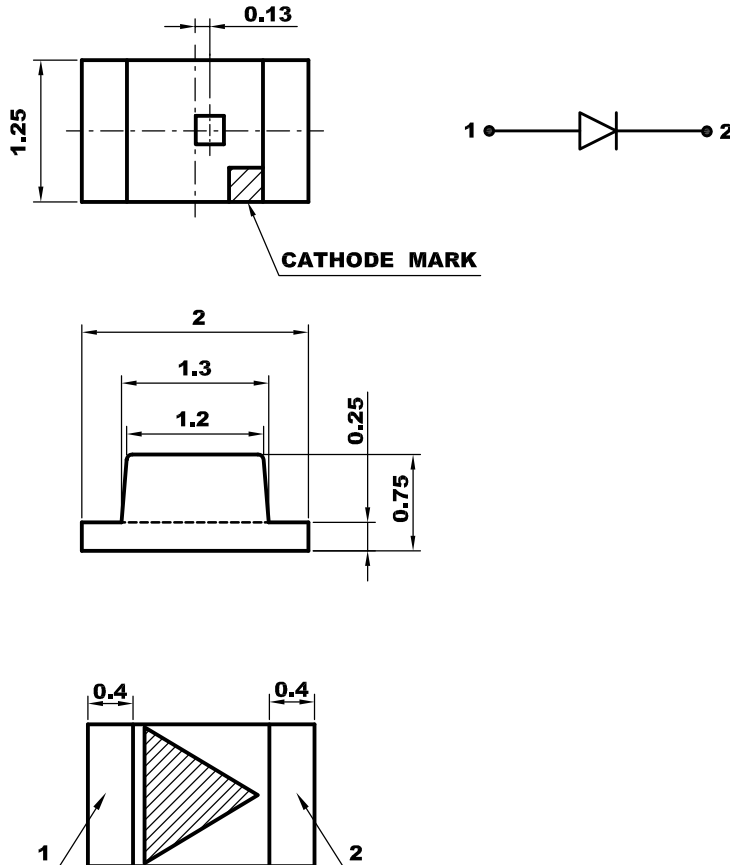


UNIT:MM
TOLERANCE:±0.15



MEET_SS00259_STANDARD	Emitting Color	Material	Lens Type	I _v (I _F = 20mA)		Viewing Angle 2 θ 1/2
				MIN (mcd)	TYP (mcd)	
Part No.	Red	AlGaAs	Water Clear	18	40	120°

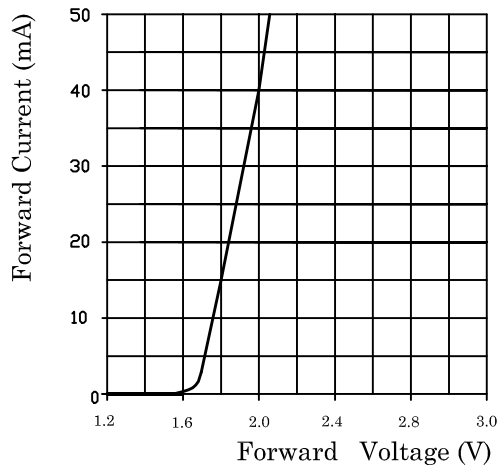
APPROVE:	CHECKED:	DRAWN:	DATA NO:	SCALE:
<i>Lin</i>	<i>Simon</i>	<i>Nicole</i>	P-M-ES-AT020-HL	15:1
				DATE: 2004/5/18

SR

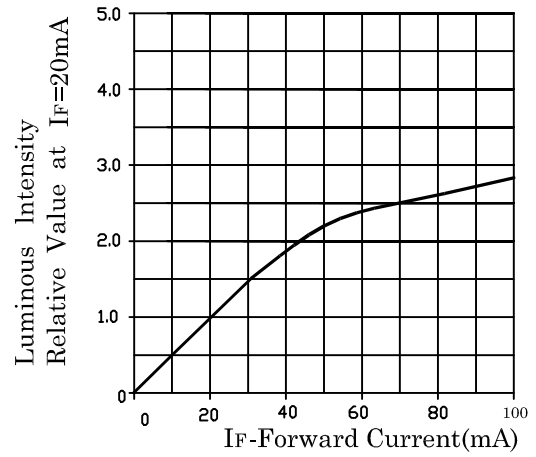
Absolute maximum ratings (TA=25°C)		SR Red (AlGaAs)	Unit
Reverse voltage	V _R	5	V
Forward current	I _F	30	mA
Forward current(Peak) 1/10 Duty Cycle,0.1ms Pulse Width	I _{FP}	100	mA
Power dissipation	P _d	72	mW
LED LAMPS:			
Operating temperature	T _{OP}	-40~+85	°C
Storage temperature	T _{ST}	-40~+85	°C
LED DISPLAYS:			
Operating temperature	T _A	-40~+85	°C
Storage temperature	T _{STG}	-40~+85	°C

Operating characteristics (TA=25°C)		SR Red (AlGaAs)	Unit
Forward voltage(typ.) I _F =20mA	V _F	1.85	V
Forward voltage(max.) I _F =20mA	V _F	2.4	V
Reverse current(max.) V _R =5V	I _R	10	uA
Wavelength at dominant emission(typ.) I _F =20mA	λ _D	645	nm
Wavelength at peak emission(typ.) I _F =20mA	λ _P	660	nm
Spectral line half-width I _F =20mA	Δλ	20	nm
Capacitance V _F =0V ,f =1MHz	C	95	pF

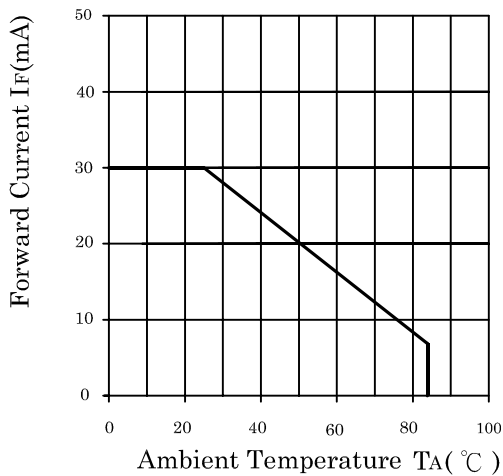
SR



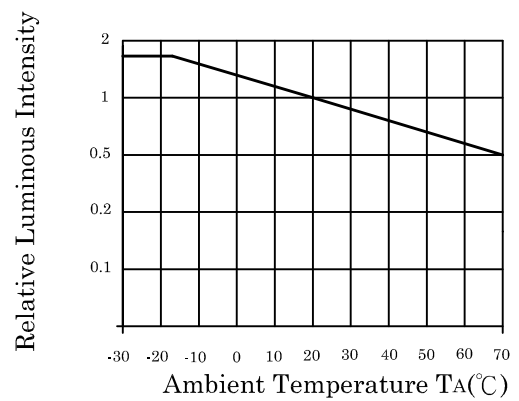
Forward Current Vs. Forward Voltage



Luminous Intensity Vs. Forward Current

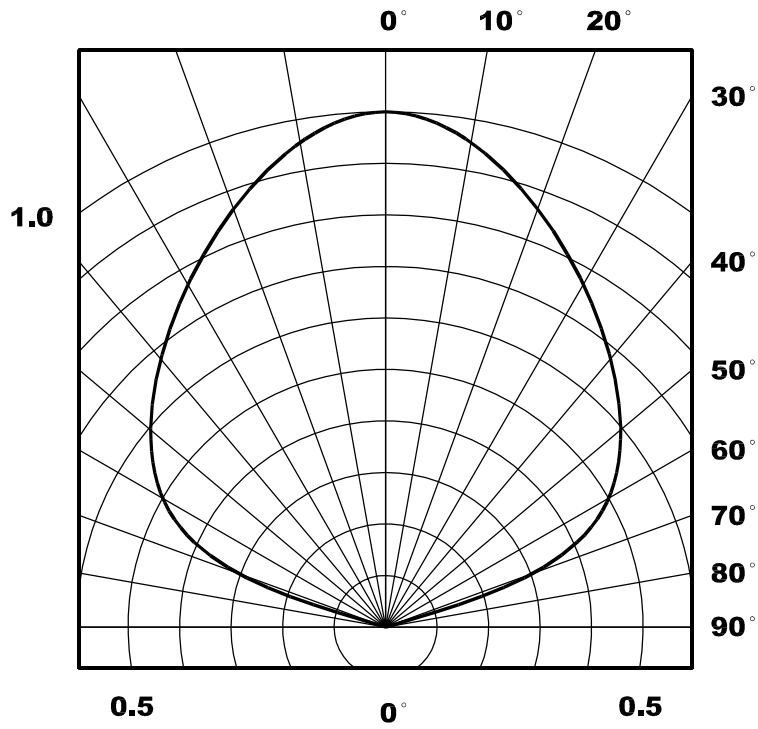


Forward Current Derating Curve



Luminous Intensity Vs. Ambient Temperature

120°

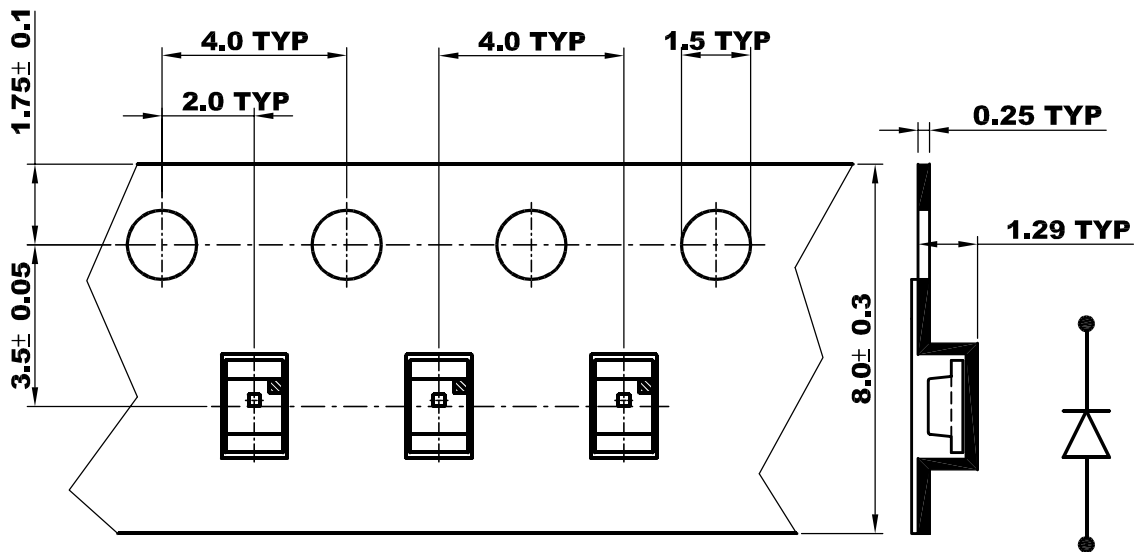


View Angle $2\theta_{1/2} = 120^\circ$

UNIT:MM
TOLERANCE:± 0.25

TYPE

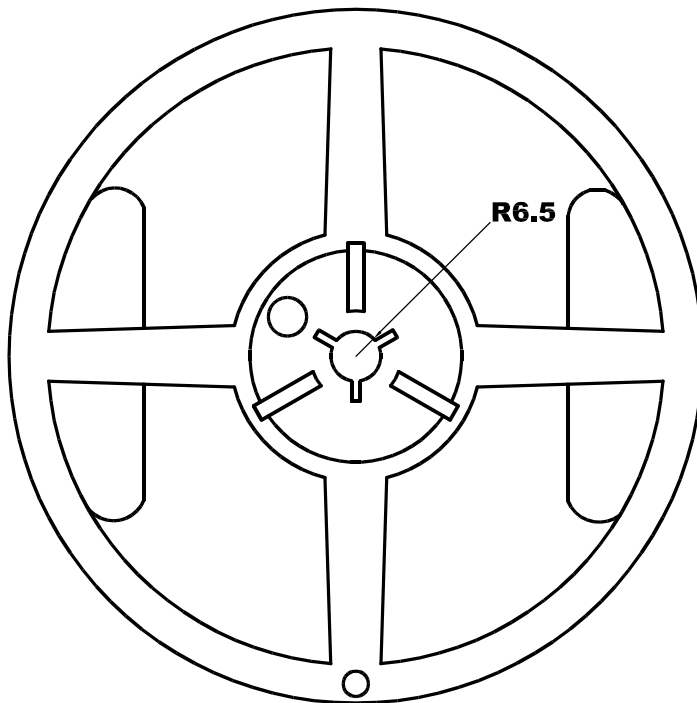
PACKAGE:2000 OR 1000PCS/REEL
REEL "T":14mmTYP



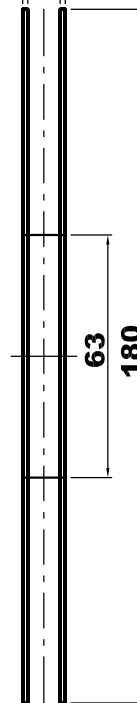
REEL SPECIFICATIONS

UNIT:MM

TOLERANCE:± 0.25



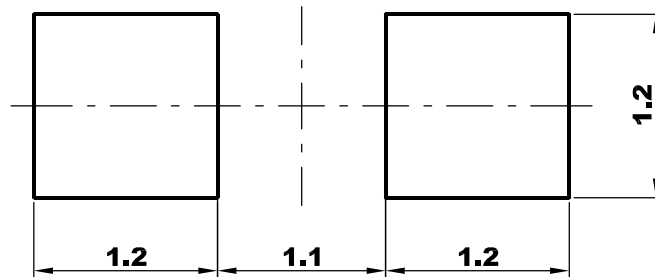
15 TYP
12.5 TYP



UNIT:MM

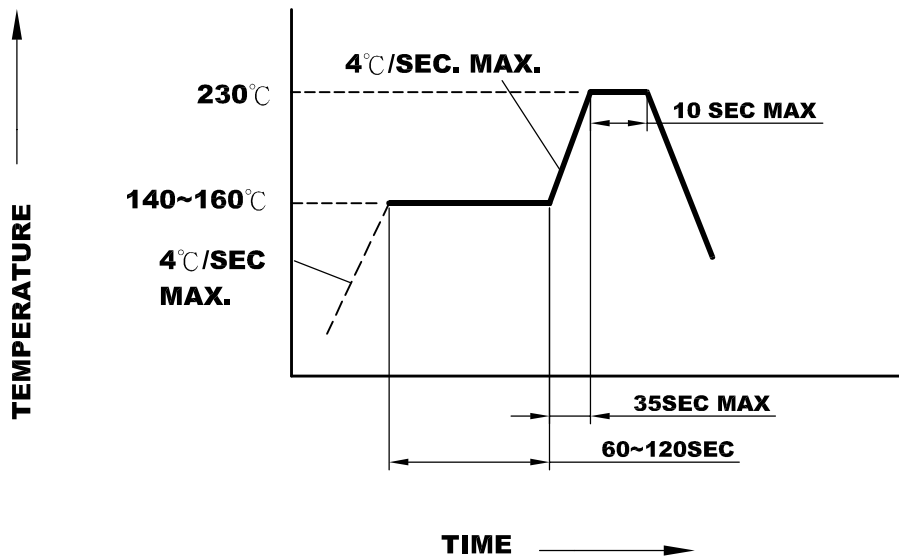
The following soldering patterns are recommended for reflow-soldering:

For reflow soldering



SMT REFLOW SOLDERING INSTRUCTIONS

SMT REFLOW SOLDERING INSTRUCTIONS



SMD HANDLING AND APPLICATION PRECAUTIONS

STORAGE

(1.1) It is recommended to store the devices in accordance with the following conditions:

Humidity: 60%RH Max.

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

(1.2) Shelf life in sealed bag: 12 month at <5°C ~ 30°C and <30%RH.

After the package is opened, the products should be used within 72hrs.

Or they should be kept at $\leq 20\%$ RH in zip-locked sealed bags.

DRY PACK AND BAKING

SMD LEDs are MOISTURE SENSITIVE devices. Avoid absorbing moisture at any time during transportation and/or storage. It is recommended to bake before soldering when the pack is unsealed after 72 hrs, or any suspicious moisture being found. Bake devices in accordance with the following conditions:

(a) 60±3°C x (12~24hrs) and <5%RH, taped reel type

(b) 100±3°C x (45min~1hr), loose packing type, or

(c) 130±3°C x (15~30min), loose packing type

ELECTRIC STATIC DISCHARGE(ESD) PROTECTION

Materials with GaN, InGaN, AlInGaP are STATIC SENSITIVE devices. They will be packed in anti-static bags. ESD protection must be deliberately observed from the initial design stage. The static-electric discharge may result in severe malfunction of the devices. In the events of manual working in process, make sure the devices are well protected from ESD at any time. Surge before and during handling products.