





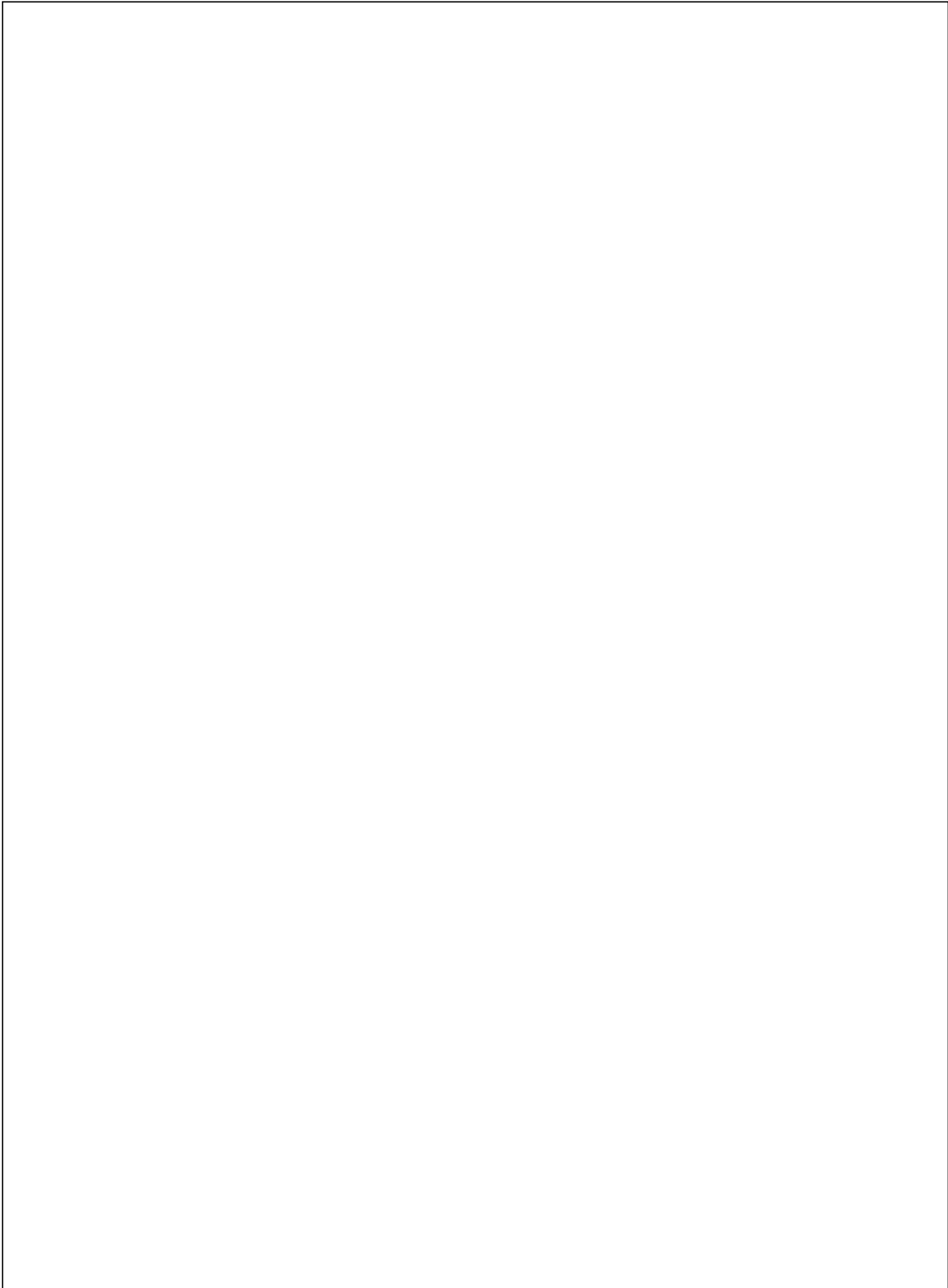
## Features

- Pb free product—RoHS compliant
- Low power consumption, High efficiency
- Reliable and rugged
- Long life – solid state reliability
- Fast response time
- High photo sensitivity

## Package Dimension

### Notes:

- All dimensions are in millimeters.
- Tolerance is  $\pm 0.10\text{mm}$  unless otherwise se (se)-2.0(unl)-.0(ss)-252784.03 71.52 783.07 72.96 783.07 c



## Electrical Optical Characteristics at Ta=25

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Range Of Spectral Bandwidth	$\lambda_{0.5}$	780	---	1100	nm	---
Wavelength Of Peak Sensitivity	$\lambda_p$	---	940	---	nm	---
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	30	---	---	V	$I_C=0.1mA$ $E_e=0mW/cm^2$
Emitter-Collector Breakdown Voltage	$BV_{ECO}$	5	---	---	V	$I_E=0.1mA$ $E_e=0mW/cm^2$
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	---	---	0.4	V	$I_C=0.1mA$ $E_e=1mW/cm^2$
Rise Time	$T_r$	---	15	---	$\mu s$	$V_{CE}=5V$ $I_C=1mA$ $R_L=1000$
Fall Time	$T_f$	---	15	---	$\mu s$	
Viewing Angle	$2\theta_{1/2}$	---	50	---	Deg.	---
Collector Dark Current	$I_{CEO}$	---	---	100	nA	$V_{CE}=10V$ $E_e=0mW/cm^2$
On State Collector Current	$I_{C(ON)}$	1.0	---	---	mA	$V_{CE}=5V$ $E_e=1mW/cm^2$ $\lambda_p=940nm$

### Note:

- $\theta_{1/2}$  is the off-axis angle at which the  $I_{C(ON)}$  is half the axial  $I_{C(ON)}$ .
- The  $I_{C(ON)}$  guarantee should be added  $\pm 15\%$  tolerance.



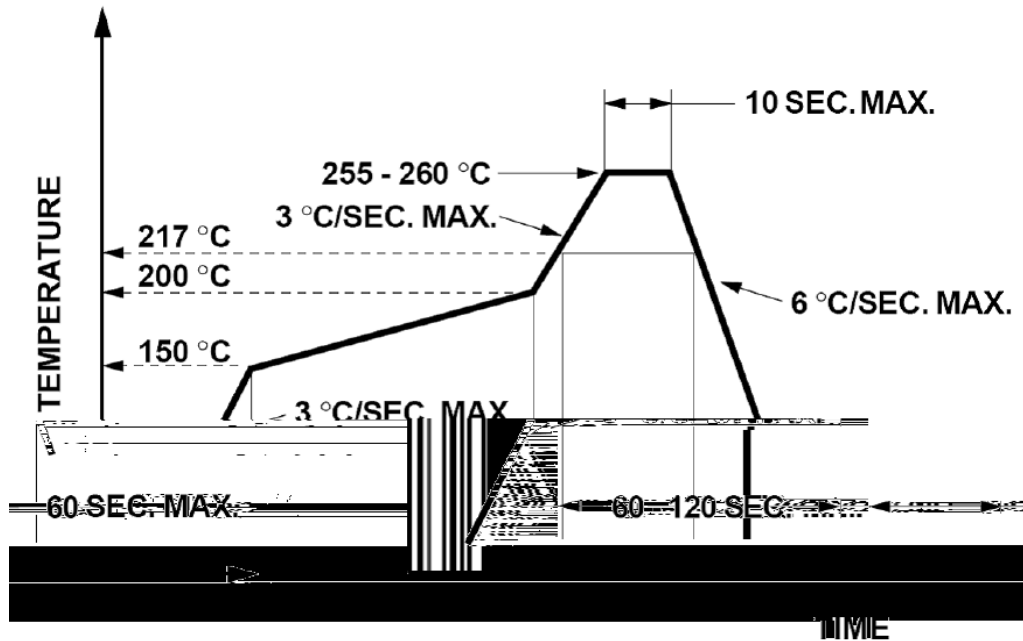


## Carrier Tape Specifications

**Note:** Tolerance unless mentioned is  $\pm 0.1$ mm; Unit = mm

## Moisture Resistant Packaging

## Suggest IR Reflow Condition For Lead Free



1. Reflow soldering should not be done more than two times.
2. When soldering, do not put stress on the LEDs during heating.

## Soldering iron

1. When hand soldering, the temperature of the iron must less than 300 °C for 3 seconds.
2. The hand solder should be done only once.

## Repairing

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of LEDs will or will not be damaged by repairing.

