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SPECIFICATION

PART NO. : LT8A42-54-T5

0603 SMD CHIP LED



Approved by

Checked by

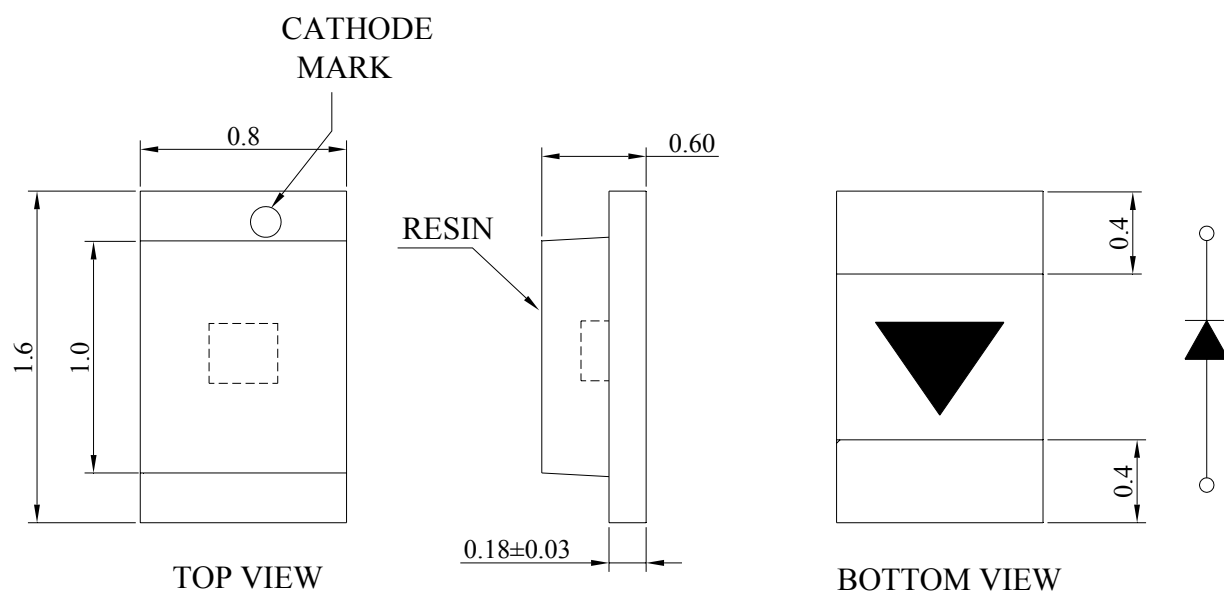
Prepared by

Tung

Lian

Ding

Package Dimensions



Notes:

1. All dimensions are in mm.
2. Tolerance is ± 0.1 mm unless otherwise noted.

Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
LT8A42-54-T5	GaAsP/GaP	Orange	White diffused

Absolute Maximum Ratings at Ta=25 °C

Parameter	Symbol	Rating	Unit
Power Dissipation	P _D	78	mW
Reverse Voltage	V _R	5	V
D.C. Forward Current	I _f	30	mA
Peak Current(1/10Duty Cycle,0.1ms Pulse Width.)	I _f (Peak)	80	mA
Operating Temperature Range	T _{opr.}	-30 to +80	°C
Storage Temperature Range	T _{stg.}	-40 to +85	°C
Soldering Temperature.	T _{sol.}	Reflow Soldering:260°C for 10 sec.	

Electrical and Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	I _v	I _f =20mA		11		mcd
Forward Voltage	V _f	I _f =20mA	1.9		2.6	V
Peak Wavelength	λ _p	I _f =20mA		630		nm
Dominant Wavelength	λ _d	I _f =20mA		625		nm
Reverse Current	I _r	V _r =5V			100	μA
Viewing Angle	2 θ 1/2	I _f =20mA		140		deg
Spectrum Line Halfwidth	Δλ	I _f =20mA		35		nm

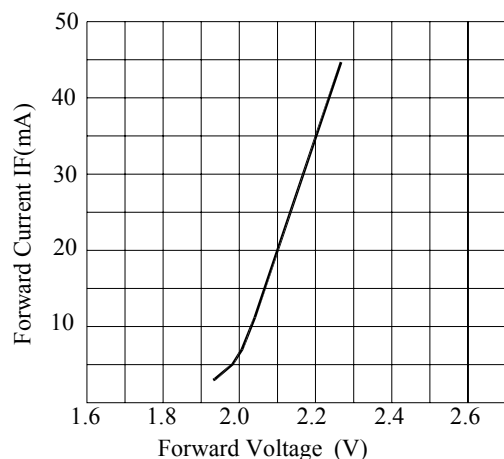
Note: Customer's special requirements are also welcome.

Product Specification

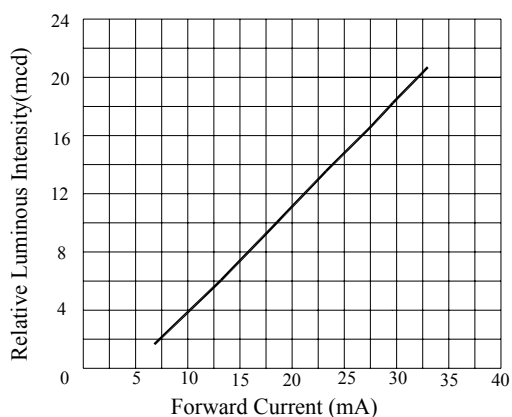
	Specification	Material	Quantity
Iv	L: 5.16-7.56mcd M: 7.56-11.0mcd N: 11.0-16.5mcd @20mA		
λ_d	620-636nm @20mA		
Vf	H: 1.9-2.2V J: 2.2-2.4V K: 2.4-2.6V @20mA		
Ir	<100 μ A @Vr=5V		
Resin	White diffused	Epoxy resin	
Carrier tape		Conductive black tape	4000pcs per reel
Reel		White	
Label	LT standard	Paper	
Packing bag	250×220mm	Aluminum laminated bag	One reel one bag
Carton	LT standard	Paper	Non-specified

Typical Electrical/Optical Characteristic Curves

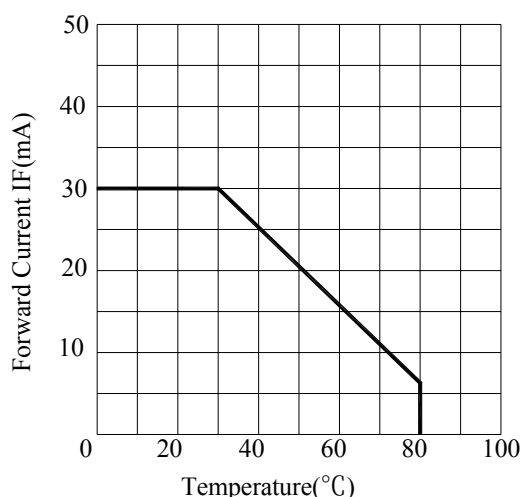
(25°C Ambient Temperature Unless Otherwise Noted)



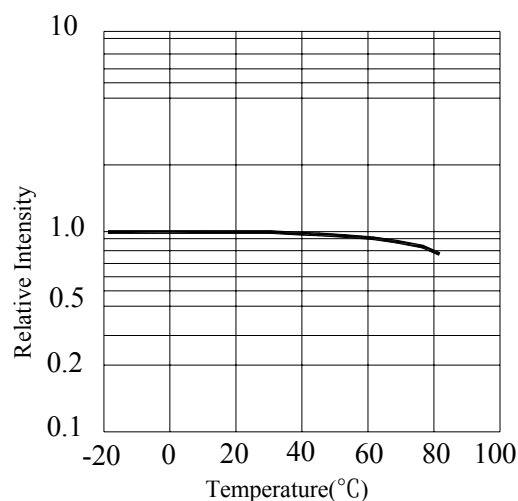
FORWARD CURRENT VS. APPLIED VOLTAGE



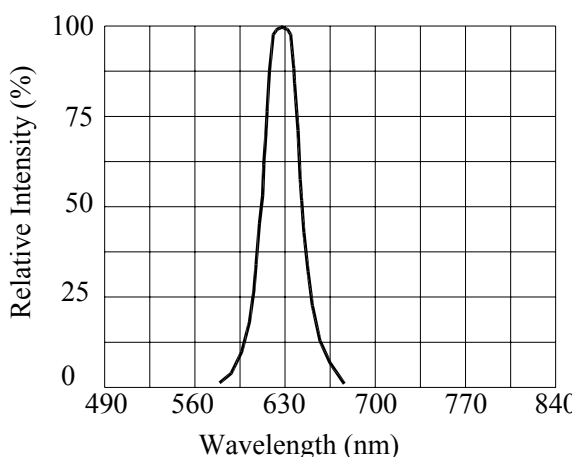
RELATIVE INTENSITY VS. FORWARD CURRENT



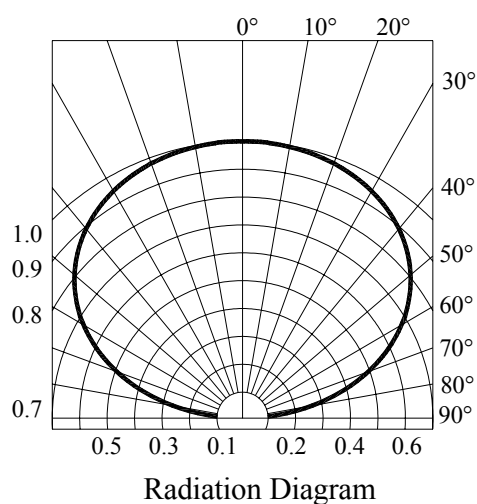
FORWARD CURRENT VS. AMBIENT TEMPERATURE



RELATIVE INTENSITY VS. AMBIENT TEMPERATURE



RELATIVE INTENSITY VS. WAVELENGTH



Precautions in Use:

Storage

Recommend storage environment

Temperature : $5^{\circ}\text{C} \sim 30^{\circ}\text{C}$ ($41^{\circ}\text{F} \sim 86^{\circ}\text{F}$)

Humidity : 60% RH Max.

Moisture measures: Please refer to Moisture-sensitive label on reels package bags.

If unused LEDs remain, they should be stored in moisture proof packages, such as sealed container with packages of moisture absorbent material (silica gel). It is also recommended to return the LEDs to the original moisture proof bag and to reseal the moisture proof bag again.

Fold the opened bag firmly and keep in dry environment.

Soldering

Reflow Soldering

Recommend use of upper and lower heater type reflow furnace.

260°C Max for up to 10 seconds, one time only.

Pre-heat is 150°C Max for up to 2 minutes Max.

In case of screen-printing, keep metal mask thickness between 0.2mm and 0.3mm.

Cleaning

Surface condition of this device may change when organic solvents such as trichloroethylene or acetone were applied.

Avoid using organic solvent.

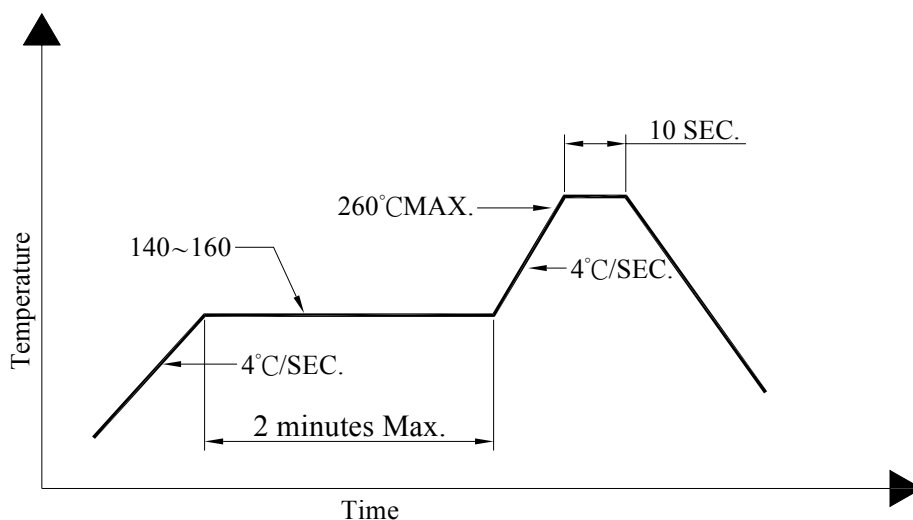
Recommend ultrasonic method 300W Max.

Packaging

EIA-481A standard package.

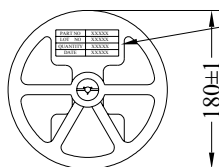
In 8mm tape on 4000 pcs diameter reels sealed in vapor/ESD barrier bags.

Reflow Temp/Time:



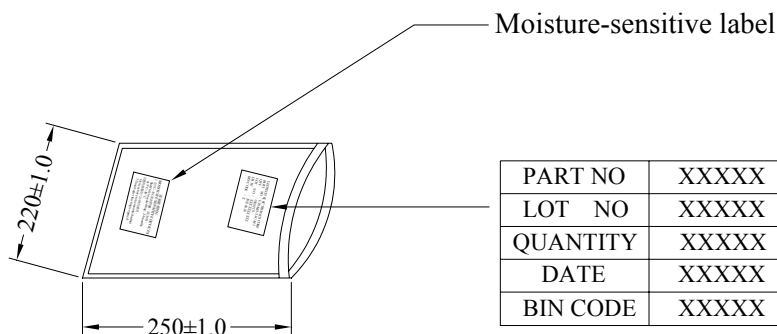
Dimensions for Tape

Reel : 4,000PCS



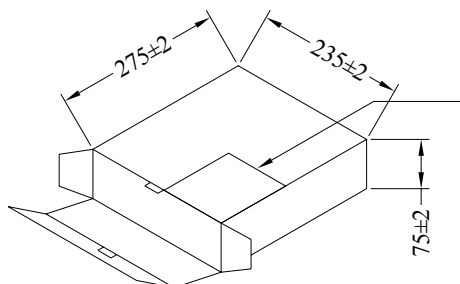
PART NO	XXXXXX
LOT NO	XXXXXX
QUANTITY	XXXXXX
DATE	XXXXXX
BIN CODE	XXXXXX

Bag : 4,000PCS



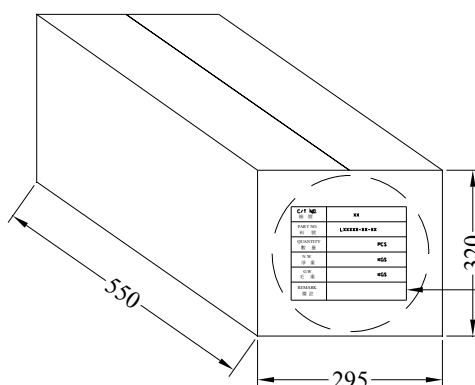
PART NO	XXXXXX
LOT NO	XXXXXX
QUANTITY	XXXXXX
DATE	XXXXXX
BIN CODE	XXXXXX

5 Bags : 20,000PCS



PART NO	XXXXXX
LOT NO	XXXXXX
BIN CODE	XXXXXX
QUANTITY	XXXXXX
DATE	XXXXXX

8 Boxes : 160,000PCS



C/T NO	XX
PART NO	XXXXXX
QUANTITY	PCS
N. W.	KGS
G. W.	KGS
REMARK	

Notes:

- 1.7 inch reel-4000 pieces per reel.
- 2.Minimum packing quantity is 500 pieces for remainders.
- 3.The maximum number of consecutive missing lamps is two.