



LEDTECH ELECTRONICS CORP.

NANYA ROAD,MUGANG ZHAOQING
CITY GUANGDONG CHINA.

TEL:86-758-2875541,2870651,2877464,2876185,2877017

FAX:86-758-2878014

[Http://www.ledtech.com.tw](http://www.ledtech.com.tw)

SPECIFICATION

PART NO. : LT8AW1-43-UEE3-TD-Z

0805 SMD CHIP LED



Approved by

Checked by

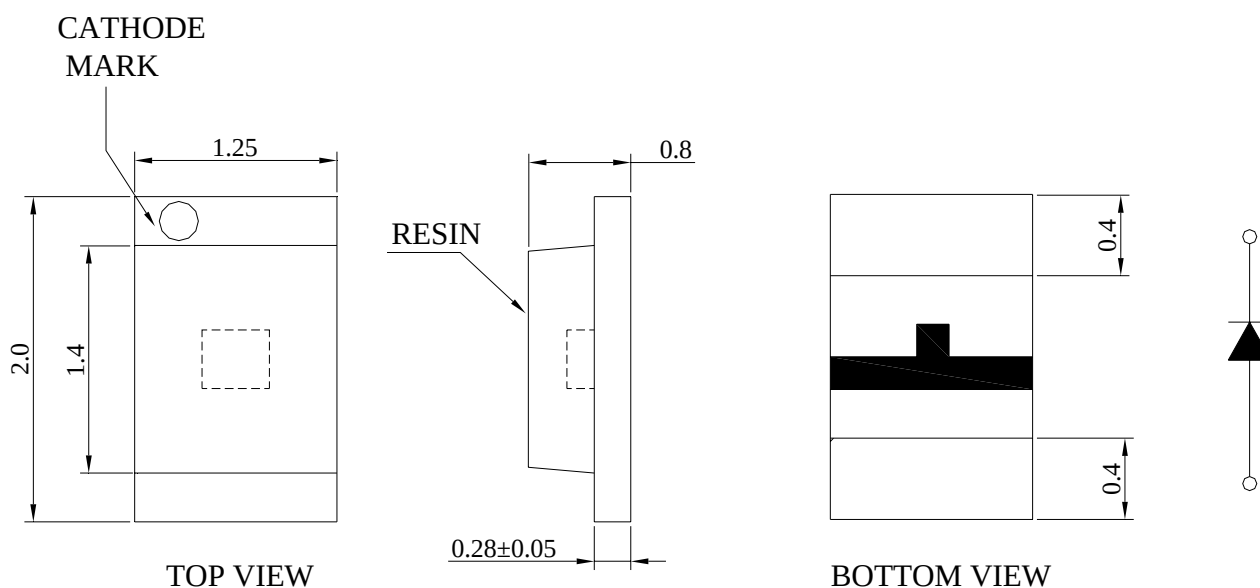
Prepared by

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		Description
	Material	Emitting Color	
LT8AW1-43-UEE3-TD-Z	InGaN/Sapphire	White	Yellow Diffused

Absolute Maximum Ratings at Ta=25 °C

Parameter	Symbol	Rating	Unit
Power Dissipation	P _D	120	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.	
Electric Static Discharge	ESD	6000	V

Electrical and Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	I _v	I _f =20mA	244	400		mcd
Forward Voltage	V _f	I _f =20mA		3.2	4.0	V
CIE Chromaticity Coordinates:X Axis	X	I _f =20mA		0.31		
CIE Chromaticity Coordinates:Y Axis	Y	I _f =20mA		0.30		
Reverse Current	I _r	V _r =5V			50	μA
Viewing Angle	2 θ 1/2	I _f =20mA		140		deg

Notes:1.The datas tested by IS tester.

2. Customer's special requirements are also welcome.

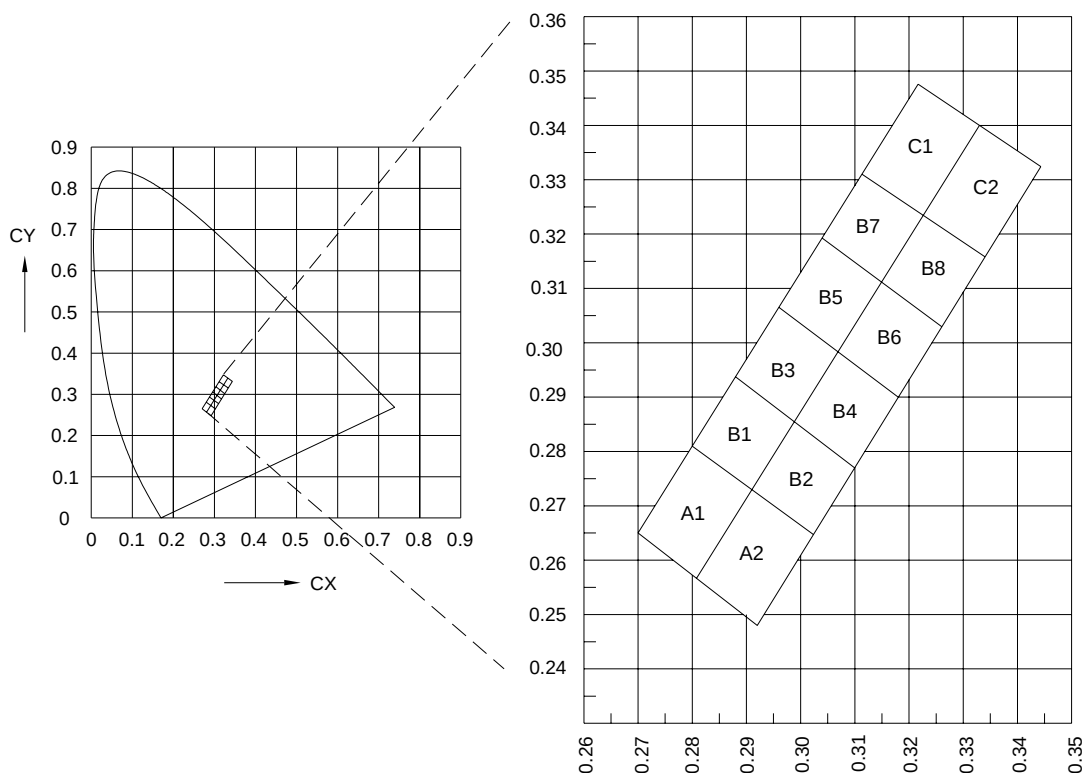
Chromaticity Coordinates Specifications for Bin Grading:

COLOR RANKS (IF=20mA, Ta=25°C)

BIN	RANK					BIN	RANK				
A1	X	0.27	0.28	0.291	0.281	B5	X	0.296	0.304	0.315	0.307
	Y	0.265	0.282	0.273	0.256		Y	0.307	0.319	0.311	0.298
A2	X	0.281	0.291	0.302	0.292	B6	X	0.307	0.315	0.326	0.318
	Y	0.256	0.273	0.265	0.248		Y	0.298	0.311	0.303	0.29
B1	X	0.28	0.288	0.299	0.291	B7	X	0.304	0.312	0.323	0.315
	Y	0.282	0.294	0.286	0.273		Y	0.319	0.331	0.323	0.311
B2	X	0.291	0.299	0.31	0.302	B8	X	0.315	0.323	0.334	0.326
	Y	0.273	0.286	0.277	0.265		Y	0.311	0.323	0.315	0.303
B3	X	0.288	0.296	0.307	0.299	C1	X	0.312	0.322	0.333	0.323
	Y	0.294	0.307	0.298	0.286		Y	0.331	0.348	0.34	0.323
B4	X	0.299	0.307	0.318	0.31	C2	X	0.323	0.333	0.344	0.334
	Y	0.286	0.298	0.29	0.277		Y	0.323	0.34	0.332	0.315

Note: X,Y Tolerance each Bin limit is ± 0.01 .

Chromaticity Coordinates & Bin grading diagram:

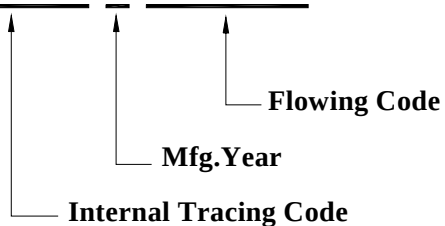


Product Specification

	Specification	Material	Quantity
IV	W: 244-367mcd X: 367-516mcd Y: 516-756mcd @20mA		
Vf	M:2.8-3.0 V N: 3.0-3.2 V P: 3.2-3.4 V Q: 3.4-3.6 V R: 3.6-3.8 V S: 3.8-4.0 V @20mA		
Ir	<50 μ A @Vr=5V		
Resin	Yellow Diffused	Epoxy resin	
Carrier tape		Conductive black tape	4000pcs per reel
Reel		White	
Label	LT standard	Paper	
Packing bag	250x220mm	Aluminum laminated bag	One reel one bag
Carton	LT standard	Paper	Non-specified
Others:			

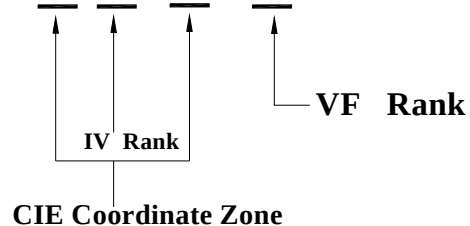
Lot No .:

W O Z A 3 0 0 0 6 2



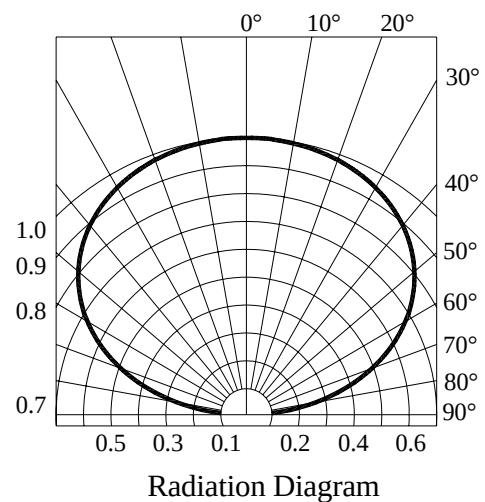
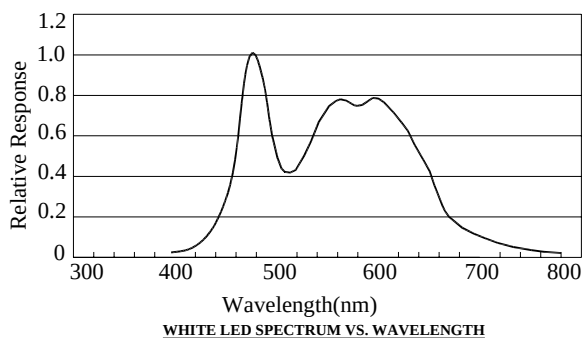
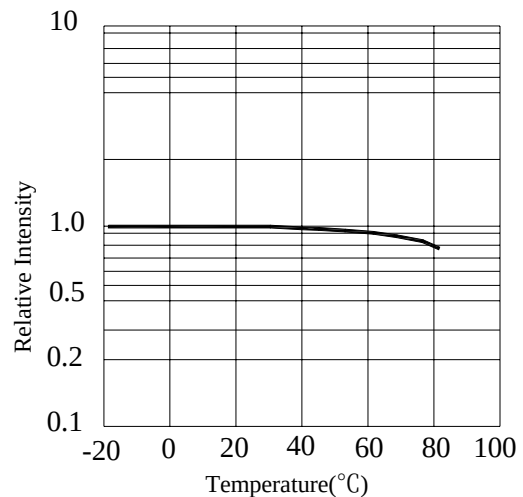
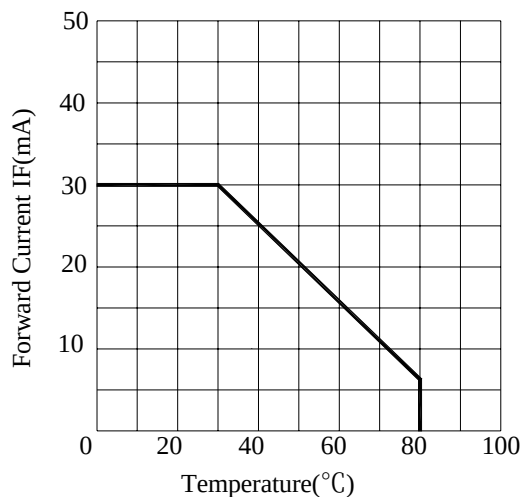
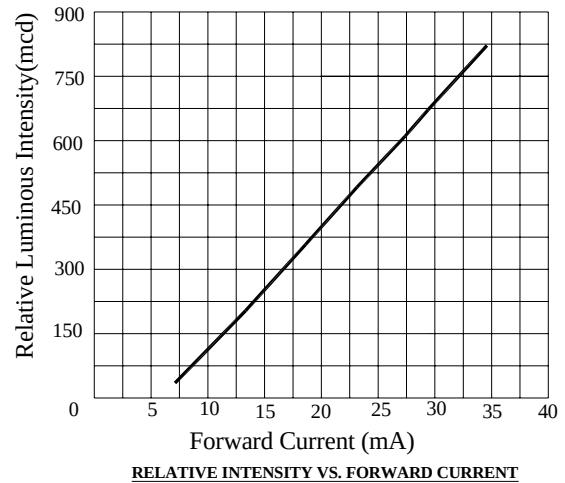
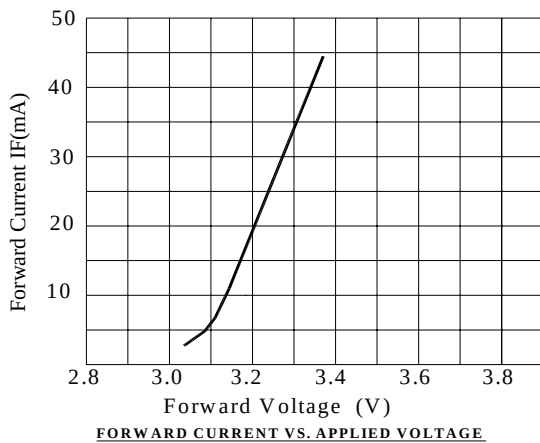
BIN CODE :

X X X - X



Typical Electrical/Optical Characteristic Curves

(25°C Ambient Temperature Unless Otherwise Noted)



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.

Use within 7 days after opening of sealed vapor/ESD barrier bags.

If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions. Baking treatment : $60 \pm 5^{\circ}\text{C}$ for 24 hours.

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.

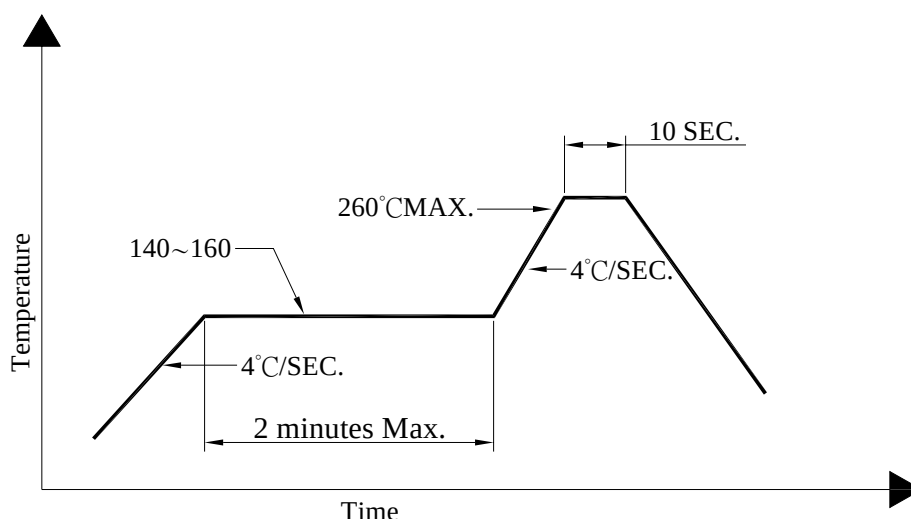
Recommend ultrasonic method 300W Max.

Packaging

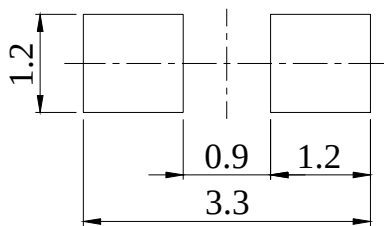
EIA-481A standard package.

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

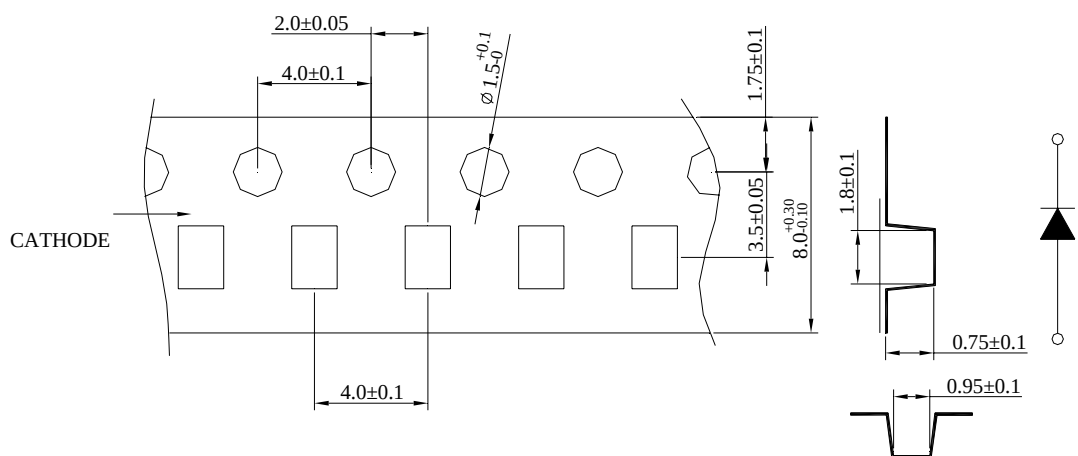
Reflow Temp/Time:



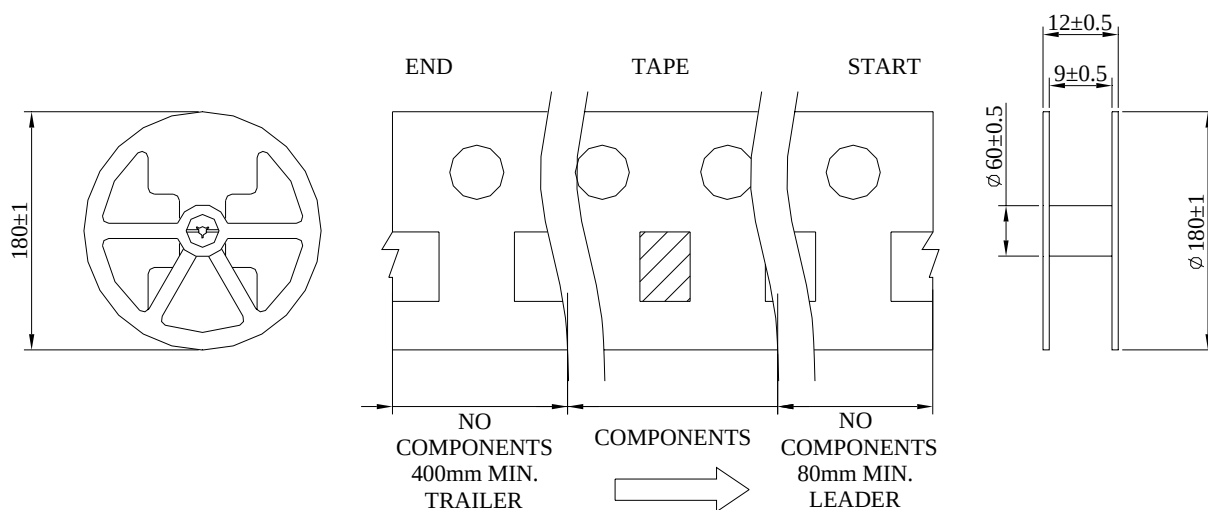
Reflow Soldering Pad Dimensions



Dimensions for Tape



Dimensions for Reel

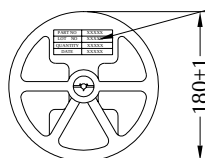


Notes:

- 1.All dimensions are in mm, tolerance is ± 2.0 mm unless otherwise noted.
- 2.Specifications are subject to change without notice.

Dimensions for Tape

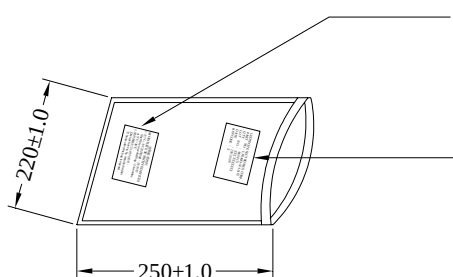
Reel : 4,000PCS



PART NO	XXXX
LOT NO	XXXX
QUANTITY	XXXX
DATE	XXXX
BIN CODE	X X X X

VF Rank
IV Rank
CIE Coordinate Zone

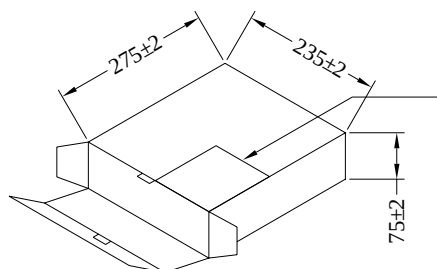
Bag : 4,000PCS



Moisture-sensitive label

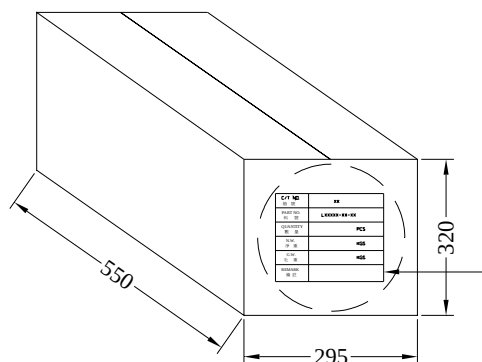
PART NO	XXXXX
LOT NO	XXXXX
QUANTITY	XXXXX
DATE	XXXXX
BIN CODE	XXXXX

5 Bags : 20,000PCS



PART NO	XXXXX
LOT NO	XXXXX
BIN CODE	XXXXX
QUANTITY	XXXXX
DATE	XXXXX

8 Boxes : 160,000PCS



C/T NO	XX
PART NO	XXXXX
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.