

1. CONSTRUCTION                      GaN on SiC blue surface mount LEDs with reflector packaged with colorless epoxy.
2. USAGE                                Source of light for display unit.
3. DIMENSIONS                        See Figure.1
4. ABSOLUTE MAXIMUM RATINGS (Ta=25 )

Power Dissipation	P D	. . . . .	94mW
Forward Current	I F	. . . . .	20mA
Peak Forward Current	I F P	. . . . .	70mA ( Notes 1 )
Reverse Voltage	V R	. . . . .	5V
Operating Temperature	Topr	. . . . .	- 30 ~ + 85
Storage Temperature	Tstg	. . . . .	- 40 ~ + 100

( Notes1 Duty 1/10 1KHz )

5. ELECTRO - CHARACTERISTICS ( Ta=25 )

DISCRIPTION	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNITS
Luminous Intensity	IV	IF=20mA	3.6	9.0	-	mcd
Forward Voltage	VF	IF=20mA	-	3.8	4.7	V
Reverse Current	IR	VR=5V	-	-	100	μ A
Peak Wave Length	P	IF=20mA	-	428	-	nm
Dominant Wave Length	D	IF=20mA	-	466	-	nm
Spectral Line Half Width		IF=20mA	-	65	-	nm

6. LUMINOUS CLASSIFICATION (Ta=25 , IF=20mA)

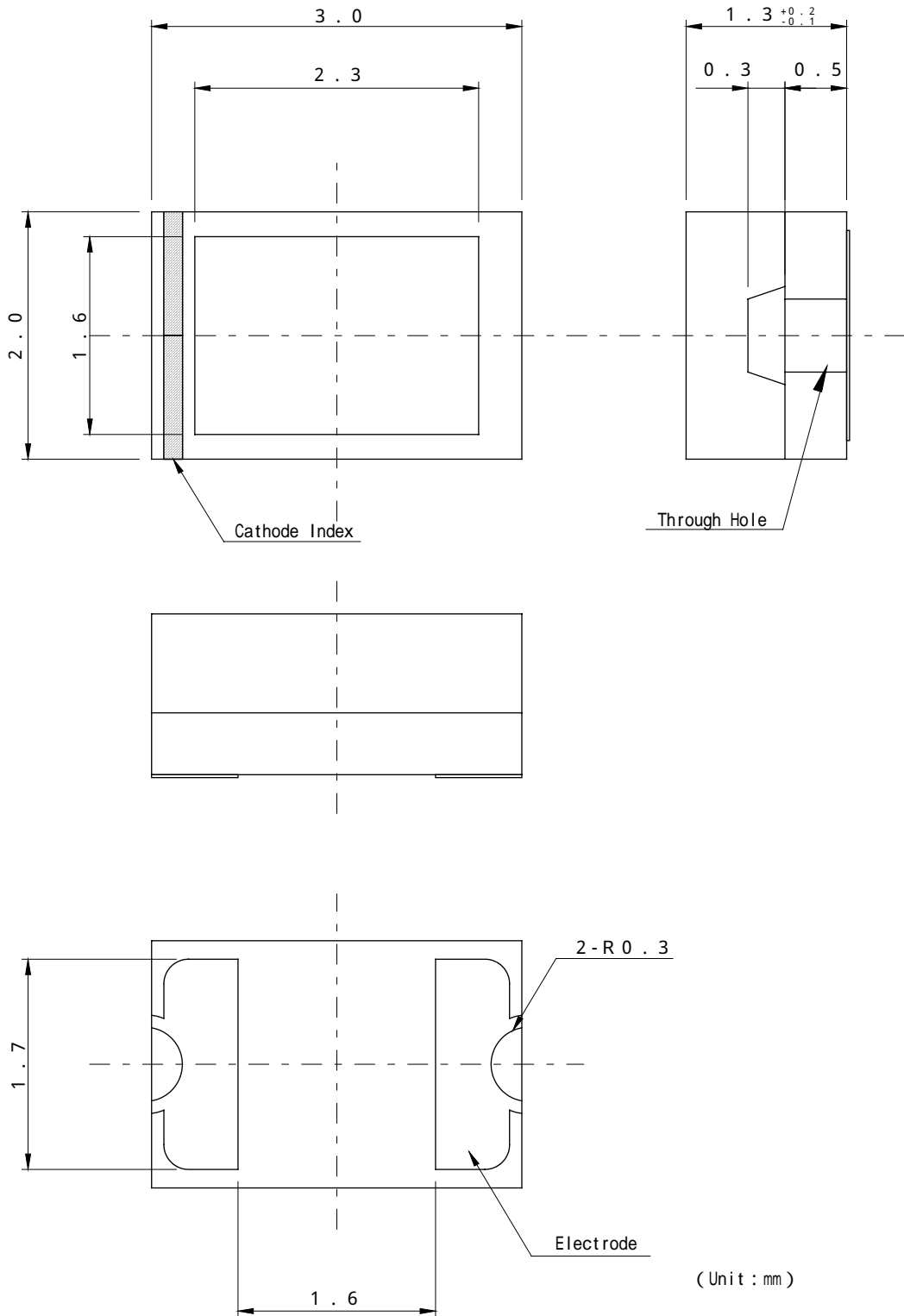
SYMBOL	LUMINOUS CLASSIFICATION RANGE			
“K”	3 . 6	~	5 . 6	mcd
“L”	5 . 6	~	9 . 0	mcd
“M”	9 . 0	~	1 4	mcd
“N”	1 4	~	( 2 2 )	mcd

If rank shift occur, we may ask for re-approval of new rank when necessary.

Measurement tolerance : ± 10% , ( ) : Reference

7. PRODUCT WEIGHT                      Product weight per piece, approx 0.015gm.

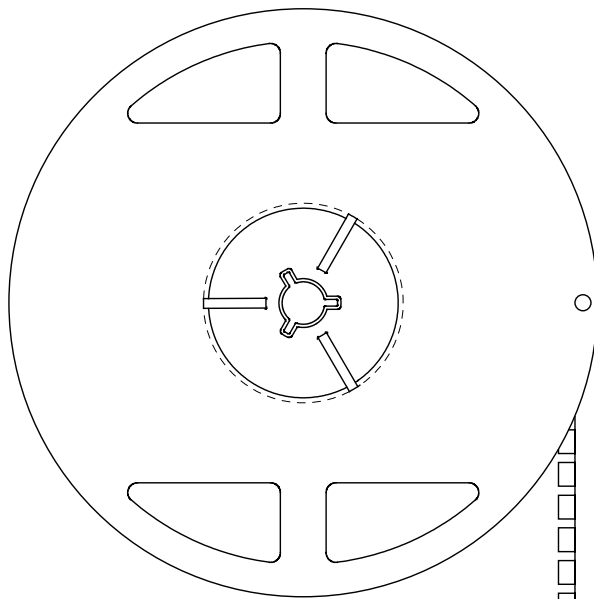
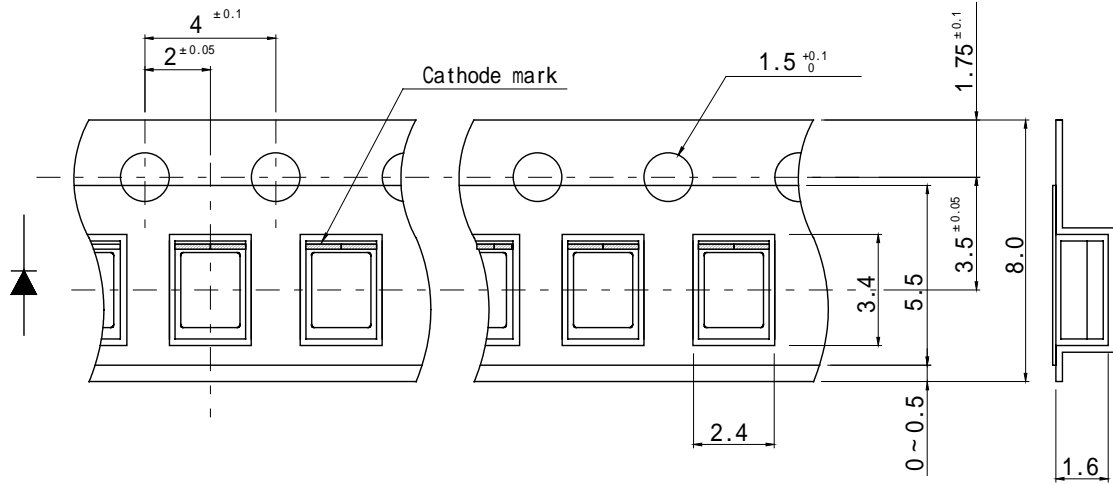
**【Figure.1】**



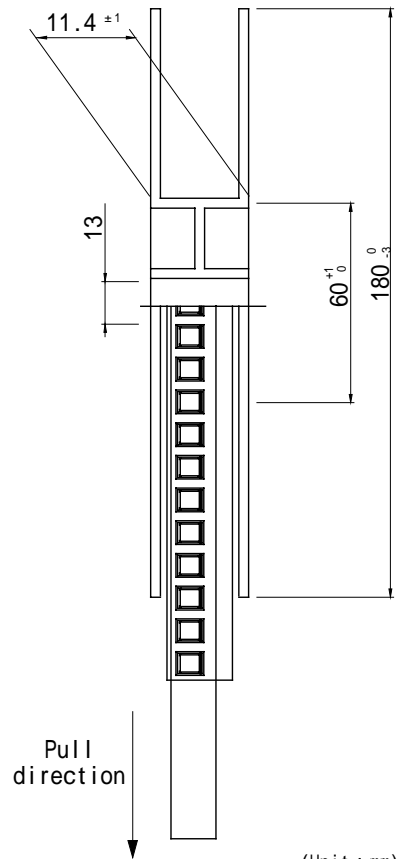
(note) Tolerance is within  $\pm 0.2\text{mm}$

unless otherwise specified

## 【T86】



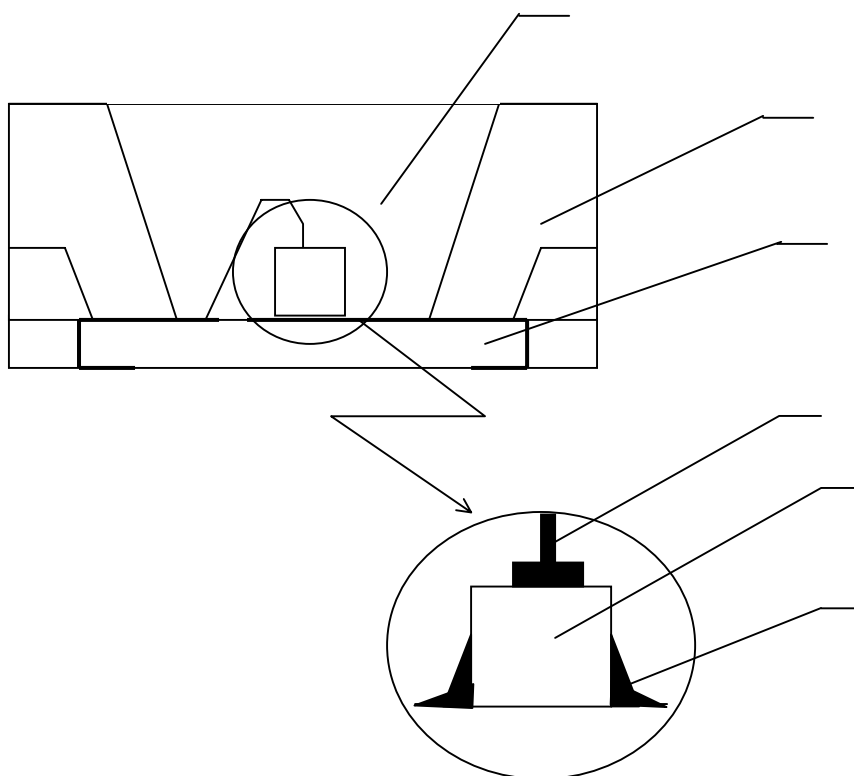
Packing quantity  
2500pcs/reel



(Unit : mm)

(note) Tolerance is within  $\pm 0.2$ mm  
unless otherwise specified

## 【STRUCTURE • MATERIAL】

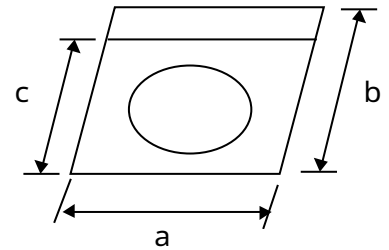


No.	APPELLATION	MATERIAL
1	Printed Wiring Board	BT Resin
2	Die Bond	Ag Paste
3	Chip	010 : GaN on SiC 011,012 : InGaN on SiC
4	Bonding Wire	Gold
5	Reflector	Aromatic Polyester
6	Resin	Epoxy Resin

## 【PACKAGING REQUIREMENTS】

### 1. PACKING

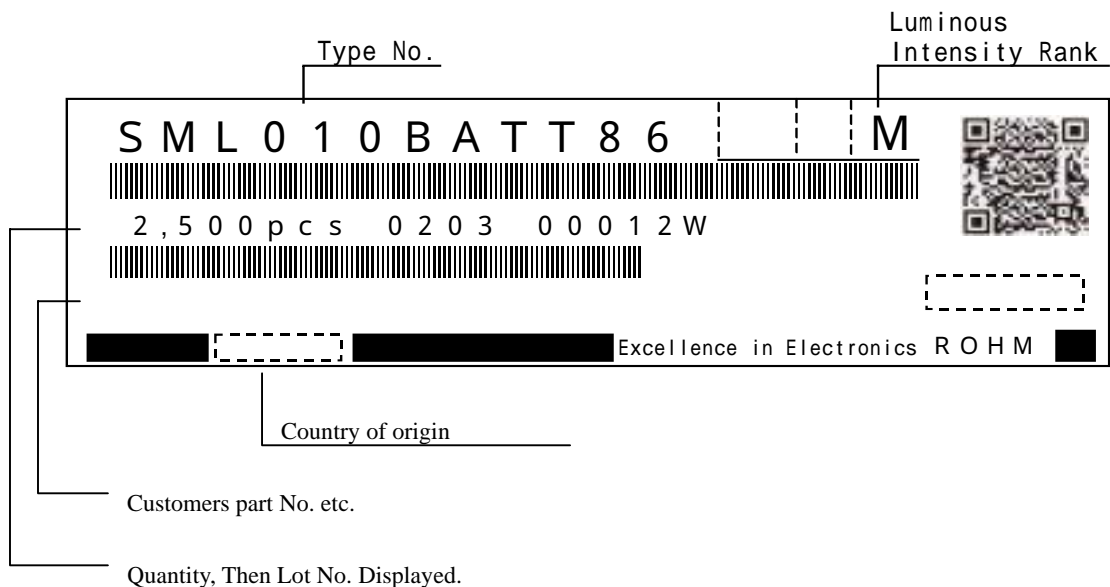
- (1) 2,500pcs are packed in one reel.
- (2) One reel is packed in aluminum bag.  
The size of aluminum bag is 240(a) × 250(b)mm.  
The size up to 230(c)mm is to zipper.
- (3) Aluminum bag is sealed by pressured for all directions.



### 2. MARKING

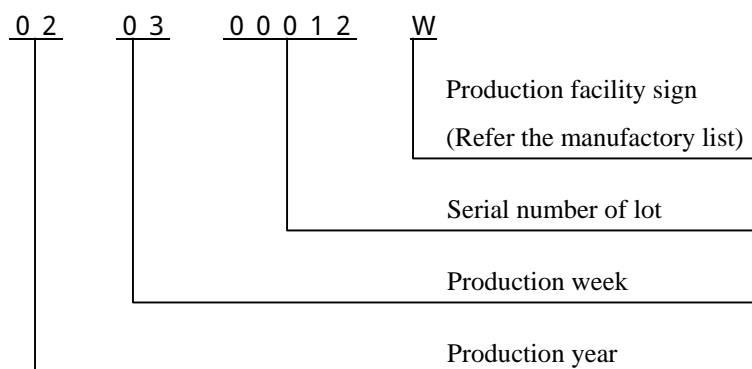
The following information shall be described on a box label:  
ROHM Type number, Packing quantity, Luminous intensity rank,  
Lot number.

#### 【FORMER LABEL SPECIFICATION】



Note)  Indicates bar code expressed by code 39.

#### 【EXAMPLE OF LOT NO. MARKING】

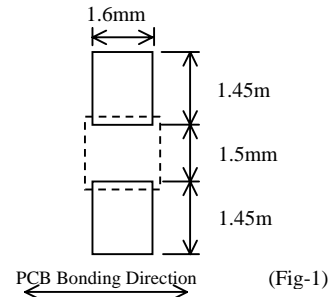


**【ATTENTION POINT IN HANDING】**

This product was developed as a surface mount LED especially suitable for soldering.  
Please take care of following points when using this device.

**1. DESIGNING OF PCB**

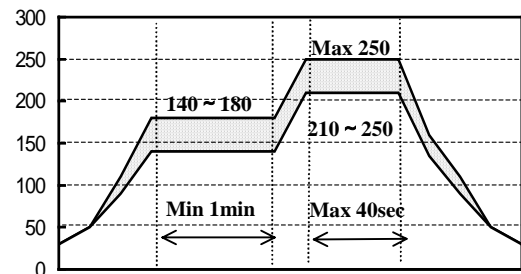
As for a recommendable solder pattern, Please refer to Fig-1.  
The size and direction of the pad pattern depends on the condition of the PCB,  
So, please investigate about the adjustment thoroughly before designing.

**2. MOUNTING**

This LED was designed to fit various mounting machines.  
A round type nozzle is recommended for a hollow lens surface.

**3. SOLDERING**

LED products do not contain reinforcement materials such as glass fillers.  
Therefore, thermal stress by soldering greatly influences its reliability.  
The temperature condition for reflow soldering should therefore be set up according to the characteristic of this products. (See Fig.2)  
Number of reflow process shall be max 2 times and these process shall be performed in a row.  
Cooling process to normal temp. Shall be required between first and second soldering process.

**4. WASHING**

Please note the following points when washing is required after soldering.

**4-1) WASHING SOLVENT**

Isopropyl alcohol or other alcohol solvent is recommendable.

**4-2) TEMPERATURE**

Below 30 °C, immersion time ; within 3 minutes.

**4-3) ULTRA SONIC WASHING**

Below 15 / 1 liter of solvent tub.

**4-4) CULING**

Below 100 °C within 3 minutes.

**5. STRAGE**

At reflow soldering, the reliability of this product is often influenced by moisture absorption so we apply the packaging with moistureproof for better condition is use, please also note that

5-1) Not to be opened before using.

5-2) To be kept in our moistureproof packaging with some desiccant (SILICA GEL) after opening it.

To be baked in case the SILICA GEL indicator loses its blue color.

5-3) Please use within 168 hours after the package was opened. (Condition at 30 °C, max.70%Rh.)

In case it is not used within 168 hours, please put it back into our packaging.

**5-4) BAKING**

Please bake under reel condition at 60 °C, 12 ~ 24 hours (max.20%Rh) after un-sealing.

While baking is done, the reel and emboss tape may be easily deformed.

Please be careful not to give any stress.

**【MANUFACTORY】**

FACTORY	SYMBOL
ROHM WAKO CO.,LTD. (KASAOKA CITY, OKAYAMA PREF.JAPAN)	W
ROHM-WAKO ELECTRONICS (MALAYSIA) SDN.BHD. (MALAYSIA)	D
ROHM ELECTRONICS WAKO (TIANJIN) CO.,LTD. (TIANJIN. CHINA)	N