SPECIFICATIONS CS85BA2C

PACKAGE DIMENSION

Cathode Mark

1.25

LED DIE

2.0

0.8

0.3

Resin

1.4

Polarity

Cathode Mark

0.4

Soldering
Terminal

0.4
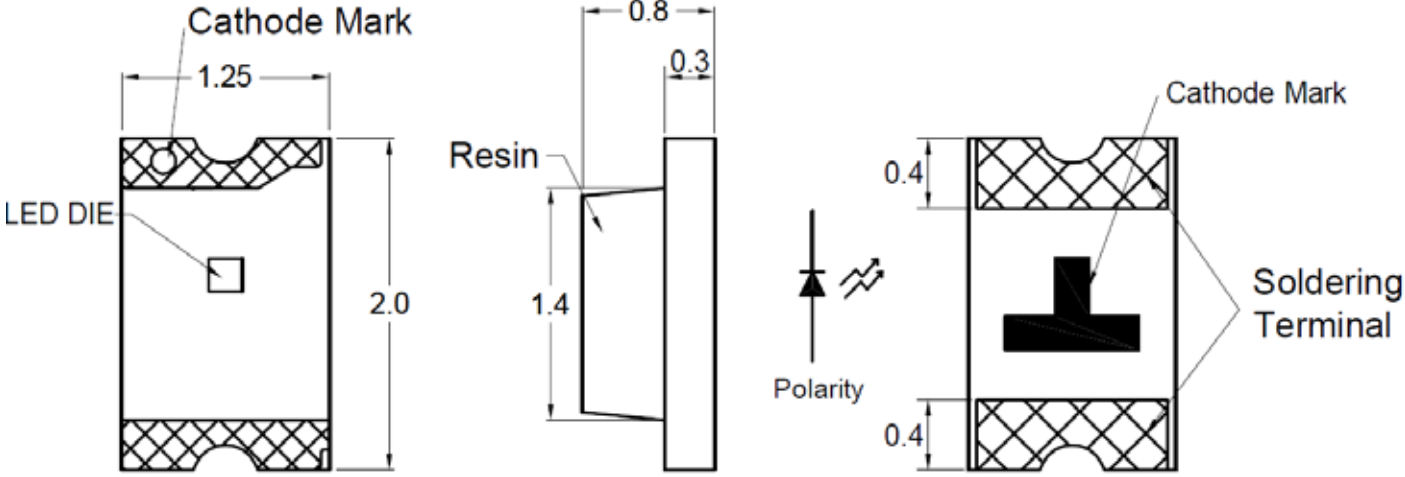
Recommended Solder Pad

1.2

1.2   0.9   1.2
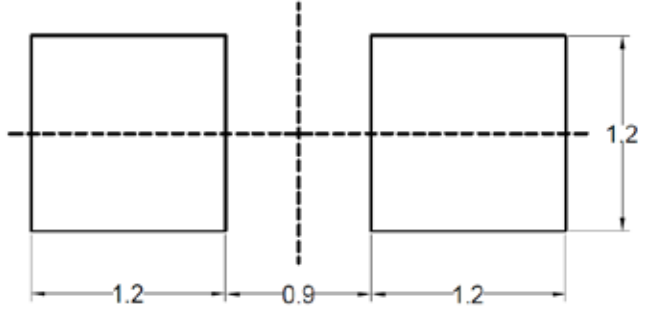
Notes:
1. All dimensions are in millimeters (inches);
2. Tolerances are ±0.1mm unless otherwise noted.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CS85BA2C	AlGaInP	Orange	Water Clear	140°

ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Parameter	Symbol	Value	Unit
Forward current	If	30	mA
Reverse current @ 5V	Ir	10	µA
Power dissipation	Pd	78	mW
Operating temperature range	Top	-40~+85	°C
Storage temperature range	Tstg	-40~+90	°C
Peak pulsing current (1/10 duty f= 10KHz)	Ifp	60	mA
Soldering Temperature	T_{SOL}	Max 260°C for 5 sec Max	

OPTICAL-ELECTRICAL CHARACTERISTICS (TA=25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Wavelength at peak emission	λpeak	I_F = 20mA	-	610	-	nm
Spectral half bandwidth	△λ	I_F = 20mA	-	17	-	nm
Dominant wavelength	λdom	I_F = 20mA	-	605	-	nm
Forward Voltage	Vf	I_F = 20mA	1.7	-	2.6	V
Luminous intensity	Iv	I_F = 20mA	50	125	-	mcd
Viewing angle at 50% Iv	2Θ ½	I_F = 20mA	-	140	-	Deg

*NOTE: 1. The forward voltage data did not including ±0.1V tolerance 2. The luminous intensity data did not including ±15% tolerance
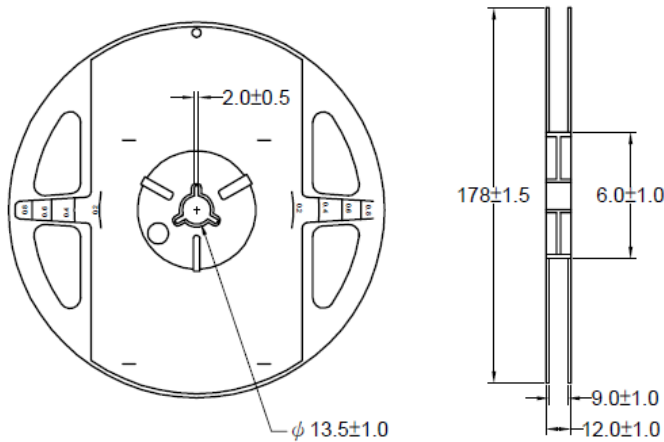
DIMENSIONS OF TAPE (Unit: mm)

Polarity

2.0
4.0±0.2
1.5
1.75
3.5±0.2
8.0±0.3
5.3
4.0±0.2
1.36
0.25
2.22
0.87
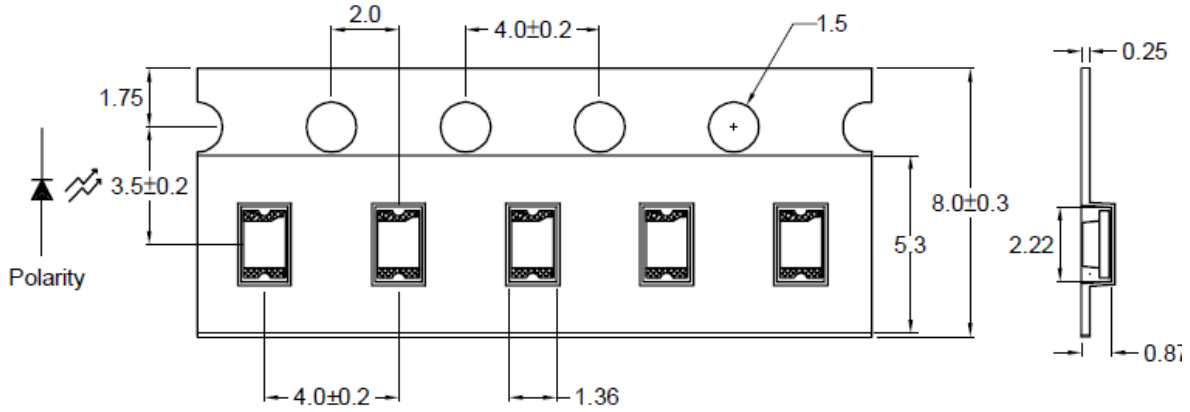
NOTE: The tolerances unless mentioned is ±0.1mm, Angle ±0.5. Unit = mm.

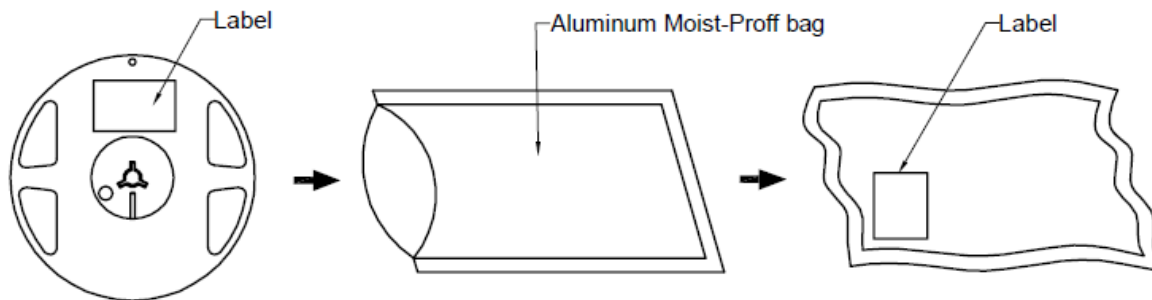## REEL DIMENSIONS

2.0±0.5
178±1.5
6.0±1.0
9.0±1.0
12.0±1.0
φ 13.5±1.0

NOTES:
1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing lamps is two;
3. The cathode is oriented towards the tape sprocket hole.
4. 4,000pcs/Reel

PACKAGING SPECIFICATION

Label — Aluminum Moist-Proff bag — Label

RoHS Compliant
Lead Free

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OPTICAL CHARACTERISTIC CURVES

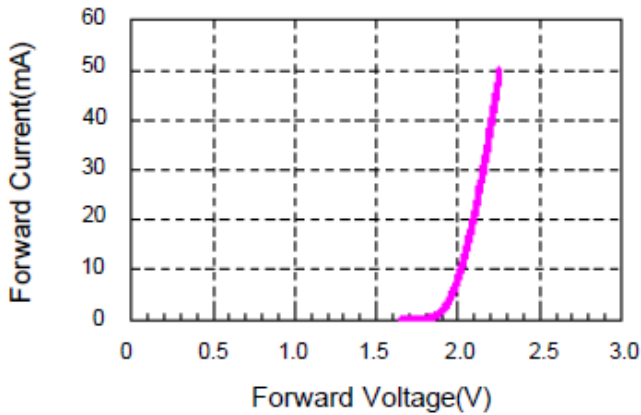Fig.1 Forward current vs. Forward Voltage

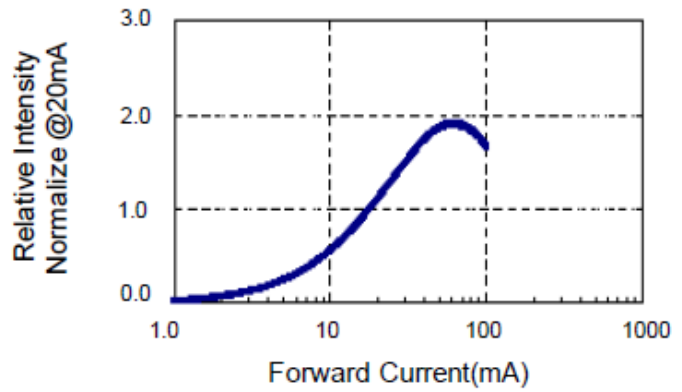
Fig.2 Relative Intensity vs. Forward Current

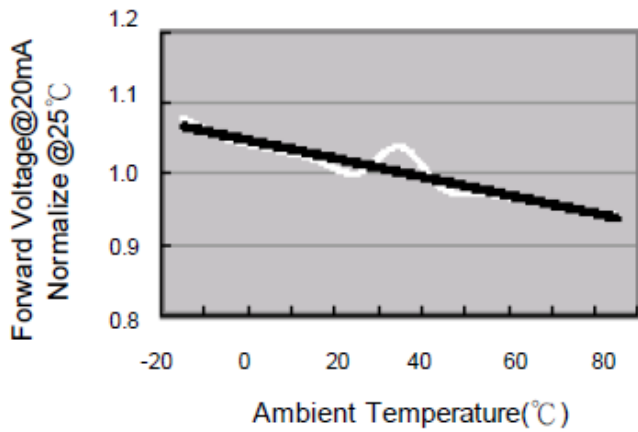Fig.3 Forward Voltage vs. Temperature
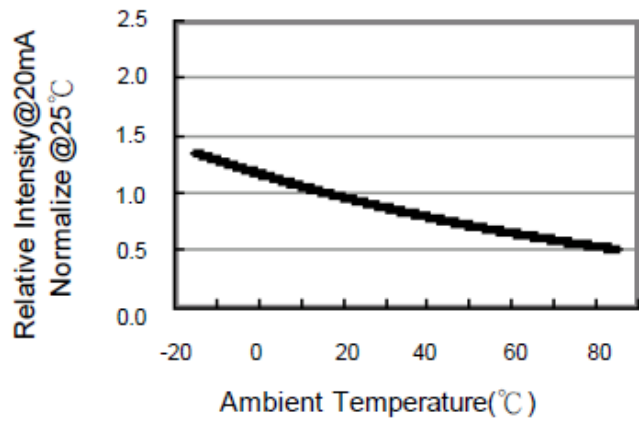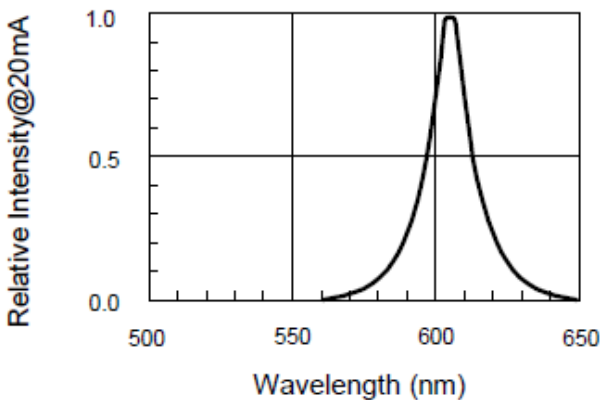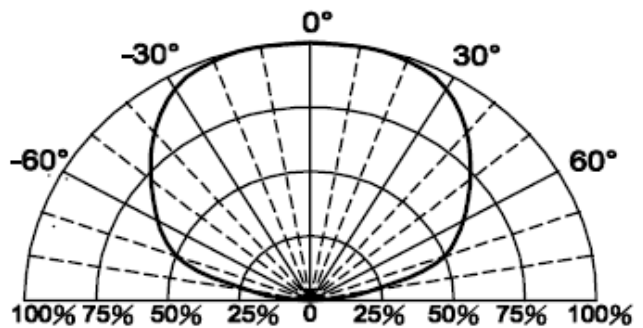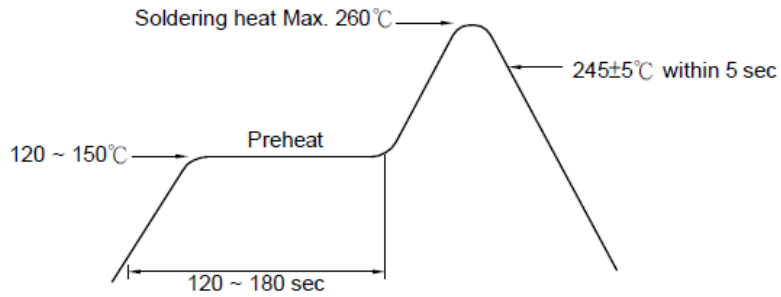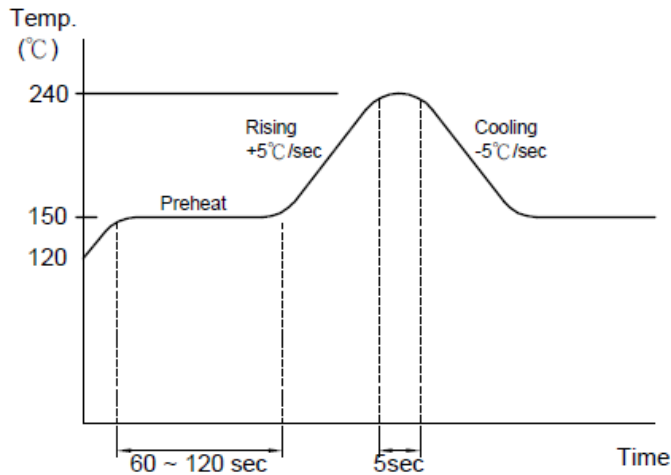

Fig.4 Relative Intensity vs. Temperature

Fig.5 Relative Intensity vs. Wavelength

Fig.6 Directivity Radiation

SOLDERING CONDITIONS – LAMP TYPE LED

1. Hand Solder

Basic spec is $\leqq$ 280℃ 3 sec one time only.

2. Wave Solder

Soldering heat Max. 260℃

245±5℃ within 5 sec

120 ~ 150℃

Preheat

120 ~ 180 sec

3-1. LEAD Reflow Solder

Temp. (℃)

240

Rising +5℃/sec

Cooling -5℃/sec

Preheat

150

120

60 ~ 120 sec

5sec

Time

3-2 PB-Free Reflow Solder

1~5°C/sec

260°C MaX. 10sec.Max

Preheat 180~200°C

1~5°C/sec

Above 220°C 60 sec.Max.

120 sec.Max.
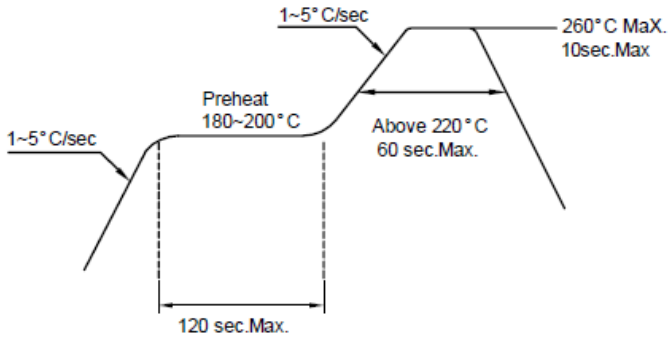
Reflow Soldering should not be done more than two times.