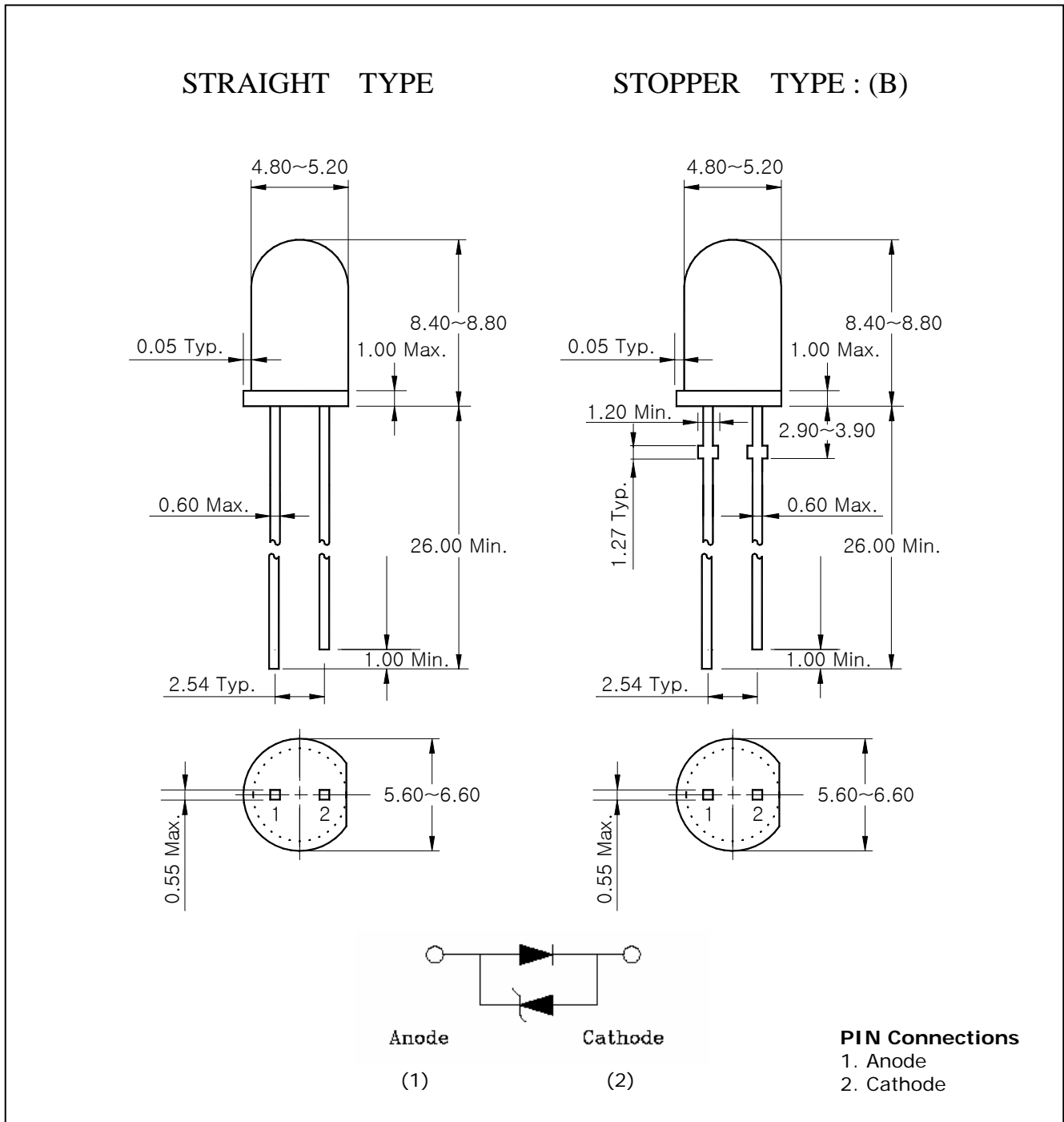


**Features**

- Colorless transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- High luminosity

**Outline Dimensions**

**unit : mm**



# SW5315E-G / SW5315E-G(B)

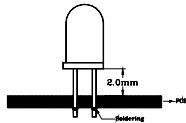
## Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	$P_D$	110	mW
Forward current	$I_F$	30	mA
*1 Peak forward current	$I_{FP}$	50	mA
Operating temperature range	$T_{opr}$	-20 ~ +85	°C
Storage temperature range	$T_{stg}$	-30 ~ +100	°C
*2 Soldering temperature	$T_{sol}$	260°C for 10 seconds	

\*1. Duty ratio = 1/16, Pulse width = 0.1ms

\*2. Keep the distance more than 2.0mm from PCB to the bottom of LED package



- ※ Recommend document
- . LED is very sensitive to ESD.

## Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F = 20\text{mA}$	2.8	-	3.6	V
*3 Luminous intensity	$I_V$	$I_F = 20\text{mA}$	1760	-	5940	mcd
*4 Chromaticity coordinates	X	$I_F = 20\text{mA}$	0.25	-	0.37	-
	Y		0.21	-	0.40	-
*5 Half angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	-	$\pm 20$	-	deg

\*3. Luminous intensity maximum tolerance for each grade classification limit is  $\pm 18\%$

\*3. Luminous Intensity Classification

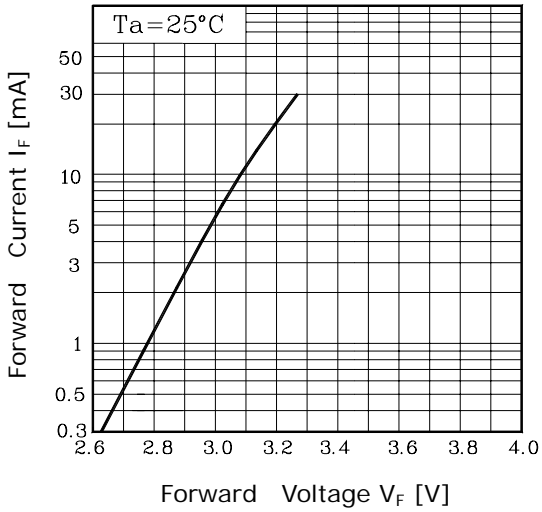
S	T	U
1760~2640	2640~3960	3960~5940

\*4. The chromaticity coordinates are derived from the CIE 1931 Chromaticity Diagram and represent the perceived color of the device.

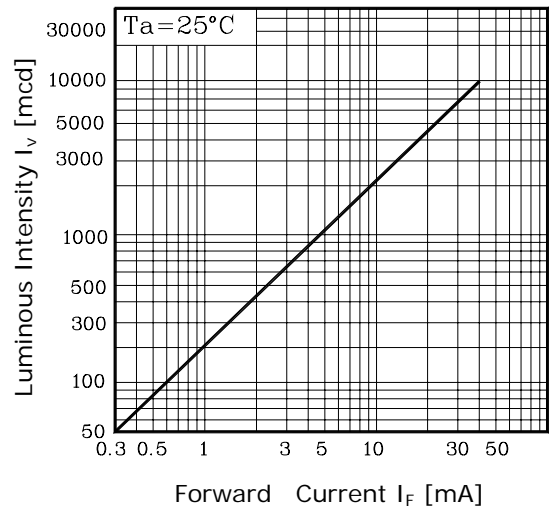
\*5.  $\theta_{1/2}$  is the off-axis angle where the luminous intensity is 1/2 the peak intensity

## Characteristic Diagrams

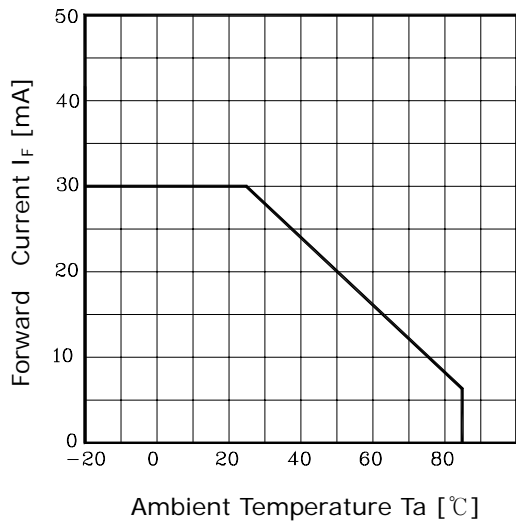
**Fig. 1  $I_F - V_F$**



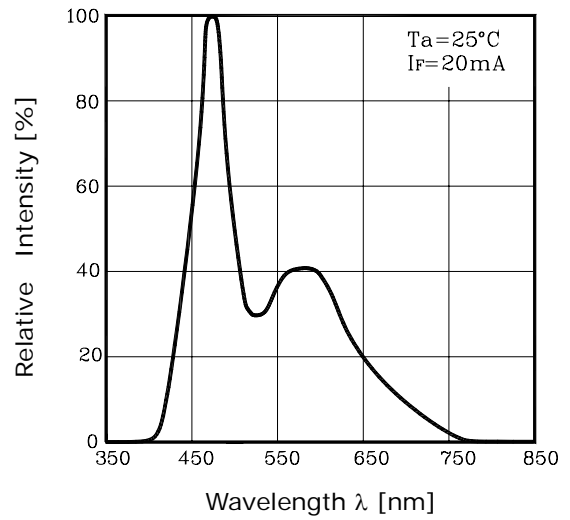
**Fig. 2  $I_V - I_F$**



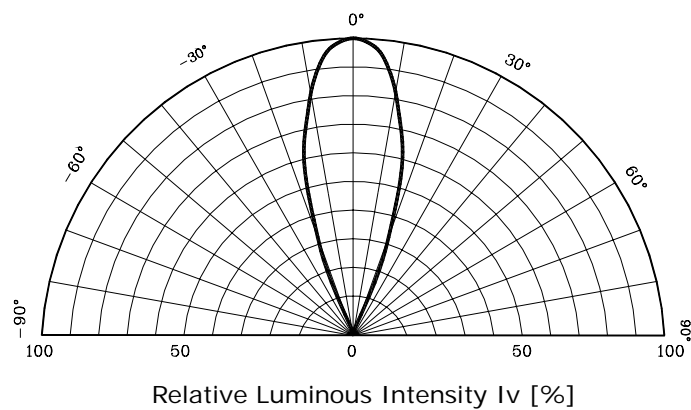
**Fig. 3  $I_F - T_a$**



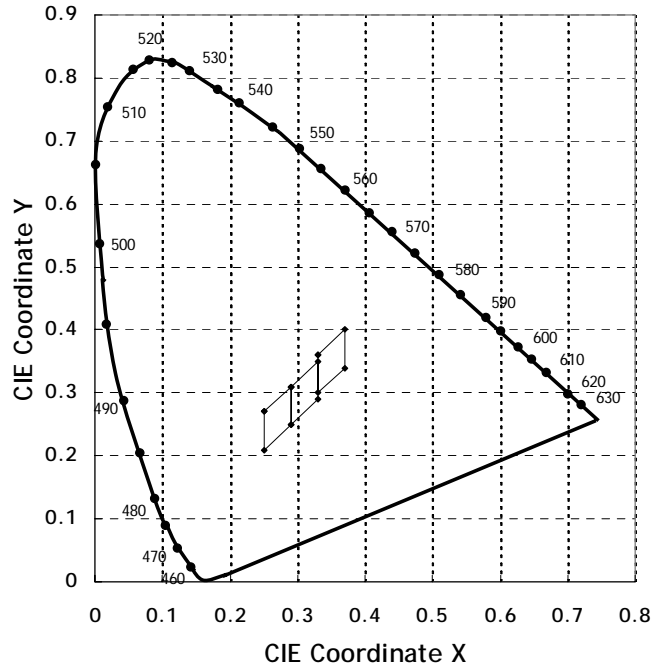
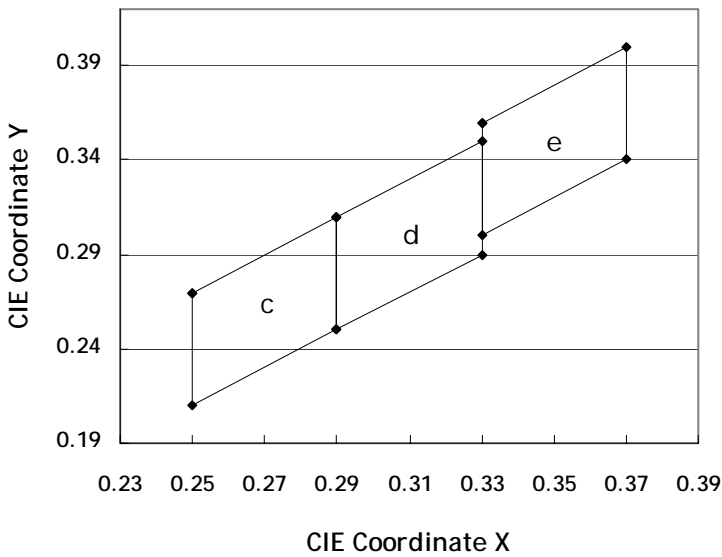
**Fig. 4 Spectrum Distribution**



**Fig. 5 Radiation Diagram**



◆ CIE 1931 UCS Diagram



● CIE Coordinates Grade Classification (Ta=25°C, If=20mA)

Color Bin	CIE Coordinates		Color Bin	CIE Coordinates		Color Bin	CIE Coordinates	
	X	Y		X	Y		X	Y
c	0.25	0.27	d	0.29	0.31	e	0.33	0.36
	0.25	0.21		0.29	0.25		0.33	0.30
	0.29	0.25		0.33	0.29		0.37	0.34
	0.29	0.31		0.33	0.35		0.37	0.40

(Do not use to combine grade classification. It must be used separately grade classification)

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