SM3417-L / SM3417-L(B)

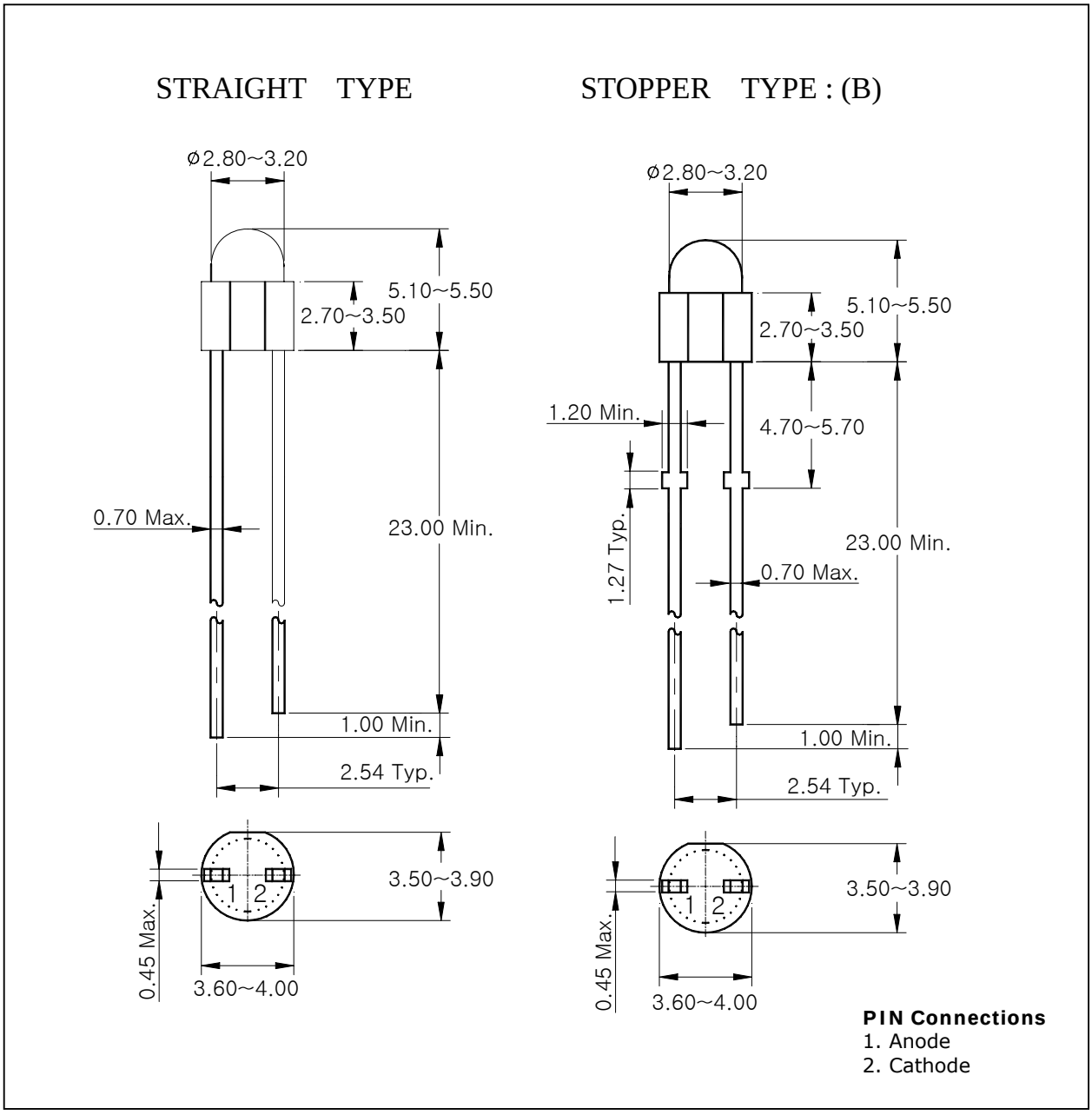
LED Lamp

Features

- Green colored transparency lens type
- ϕ3mm(T-1) all plastic mold type
- Low power consumption

Outline Dimensions

unit : mm

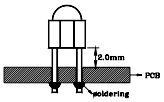


Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	70	mW
Forward current	I_F	30	mA
*[1]Peak forward current	I_{FP}	50	mA
Reverse voltage	V_R	4	V
Operating temperature range	T_{opr}	-30～85	℃
Storage temperature range	T_{stg}	-40～100	℃
*[2]Soldering temperature	T_{sol}	260℃ for 10 seconds	

*1.Duty ratio = 1/10, Pulse width = 0.1ms
*2.Keep the distance more than 2.0mm from PCB to the bottom of LED package



Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F= 20mA	2.0	-	2.4	V
*[3]Luminous intensity	I_V	I_F= 20mA	43	-	155	mcd
Dominant wavelength	λ_D	I_F= 20mA	565	568	571	nm
Spectrum bandwidth	$\Delta\lambda$	I_F= 20mA	-	30	-	nm
Reverse current	I_R	V_R=4V	-	-	10	uA
*[4]Half angle	θ1/2	I_F= 20mA	-	±22	-	deg

*3. Luminous intensity maximum tolerance for each grade classification limit is ±18%
(The test result of I_F=20mA is only for reference)

*4. Dominant wavelength is derived form the CIE1931 Chromaticity diagram
A tolerance of ±0.5nm for dominant wavelength

*5. θ1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity

• V_F / I_V / λ_D Grade Classification (Ta=25℃)

Test Condition @ I_F=20mA		
Forward Voltage [V]	Luminous Intensity [mcd]	Dominant Wavelength [nm]
1 : 2.0~2.2	J : 43~68	a : 565~568
	K : 68~100	
2 : 2.2~2.4	L : 100~155	b : 568~571

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

Characteristic Diagrams

Fig. 1 I_F - V_F

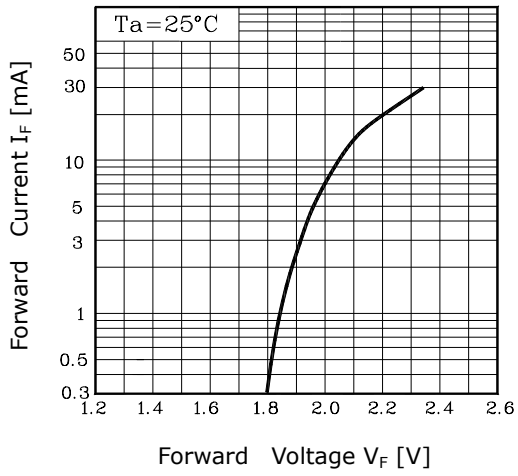


Fig. 2 I_V - I_F

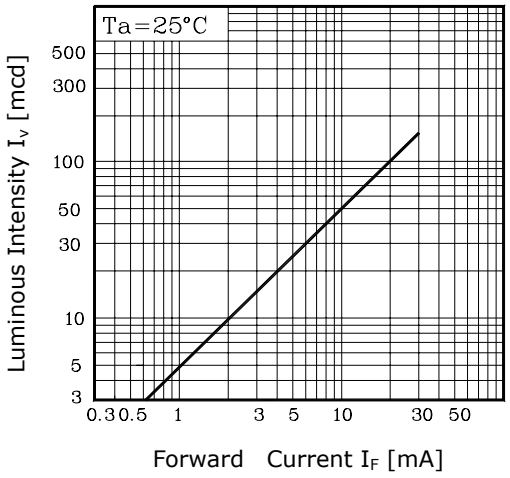


Fig. 3 I_F – Ta

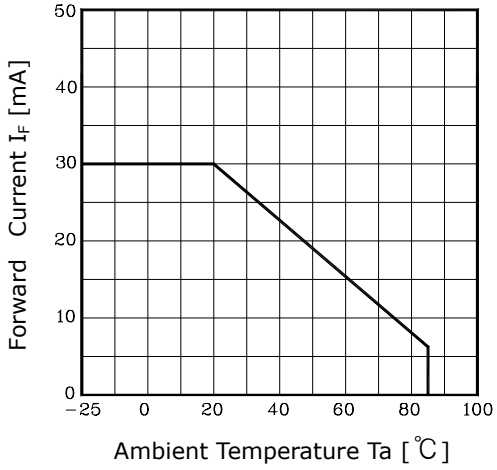


Fig.4 Spectrum Distribution

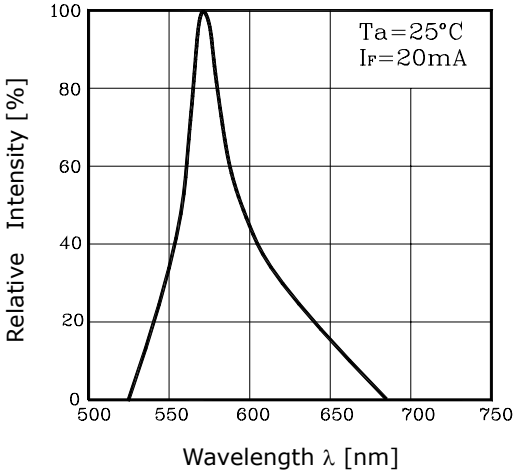
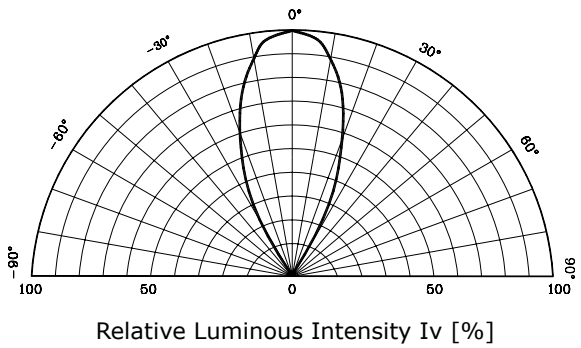


Fig. 5 Radiation Diagram



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