





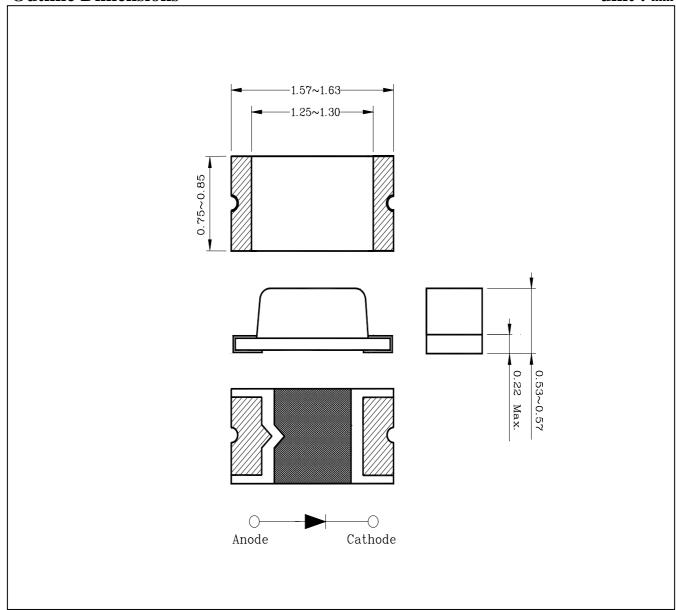
Features

- 1.6mm(L)×0.8mm small size surface mount type
- Thin package of 0.55mm(H) thickness
- Diffusion lens optic
- Low power consumption type chip led

Applications

- LCD backlighting
- Keypad backlighting
- Symbol backlighting
- Front panel indicator lamp

Outline Dimensions unit: mm



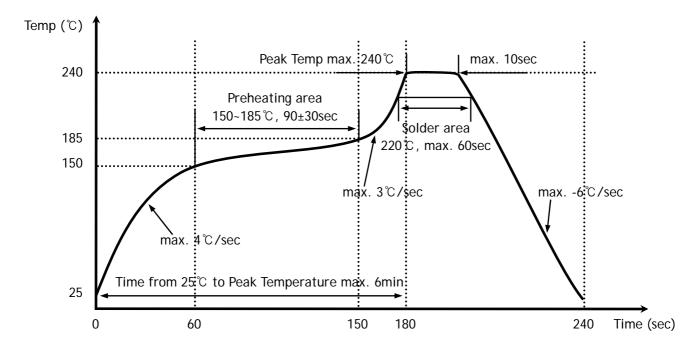
KSD-08G018-001

Absolute Maximum Ratings

 $(Ta=25^{\circ}C)$

Characteristic	Symbol	Rating	Unit
Power dissipation	P _D	63	mW
Forward current	I_{F}	25	mA
*1Peak forward current	${ m I}_{\sf FP}$	50	mA
Reverse voltage	V_R	4	V
Operating temperature range	T _{opr}	-25~80	$^{\circ}$
Storage temperature range	T _{stg}	-30~100	$^{\circ}$
*2Soldering temperature	T _{sol}	240°C for 10 seconds	

^{*1.} Duty ratio = 1/16, Pulse width = 0.1ms



Electrical / Optical Characteristics

 $(Ta=25^{\circ}C)$

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V _F	I _F = 20mA	-	2.2	2.5	V
*3Luminous intensity	I _V	I _F = 20mA	27	-	155	mcd
* ⁵ Peak wavelength	λ_{P}	I _F = 20mA	588	593	597	nm
Spectrum bandwidth	Δ_{λ}	$I_F = 20mA$	-	30	-	nm
Reverse current	I_{R}	V _R =4V	-	-	10	uA
* ⁴ Half angle	θ1/2 X	I _F = 20mA	-	±65	-	deg
	A A		-	±70	-	

^{*2.} Recommended reflow soldering temperature profile

- *4. θ 1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity
- *5. λ_P Grade Classification (λ_P Grade tolerance for ±3nm)
- *3. Luminous intensity maximum tolerance for each grade classification limit is $\pm 18\%$
- I_V / λ_P Grade Classification (Ta=25°C)

Test Condit	cion @I _F =20mA		
Luminous Intensity [mcd]	Peak Wavelength [nm]		
I : 27~43	a : 588~593		
J : 43~68	a . 366~593		
K : 68~100	b : 593~597		
L: 100~155	υ. <i>39</i> 3∾397		

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

Characteristic Diagrams

Fig. 1 I_F - V_F

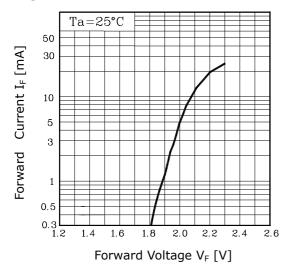


Fig. 2 I_V - I_F

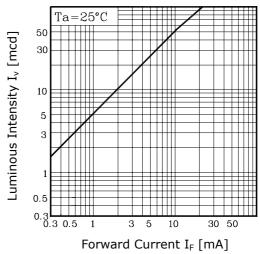


Fig. $3 I_F - Ta$

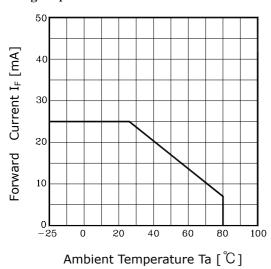


Fig.4 Spectrum Distribution

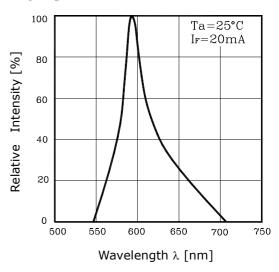


Fig. 5-1 Radiation Diagram(X)

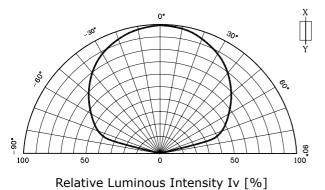
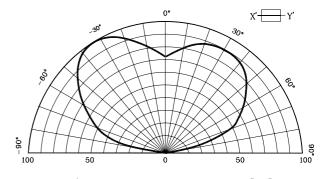


Fig. 5-2 Radiation Diagram(Y)



Relative Luminous Intensity Iv [%]

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