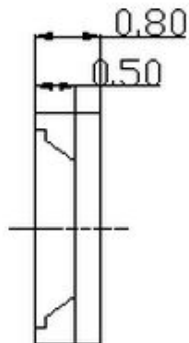
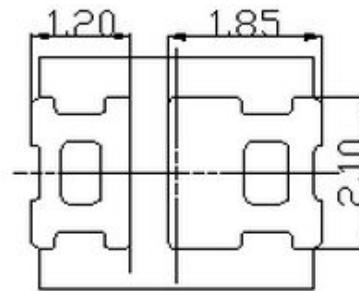
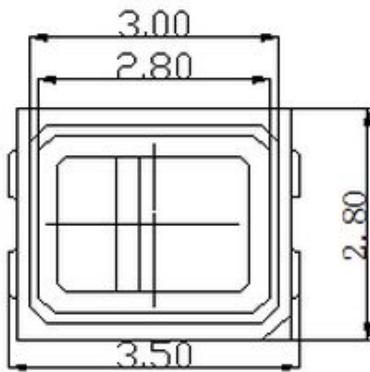
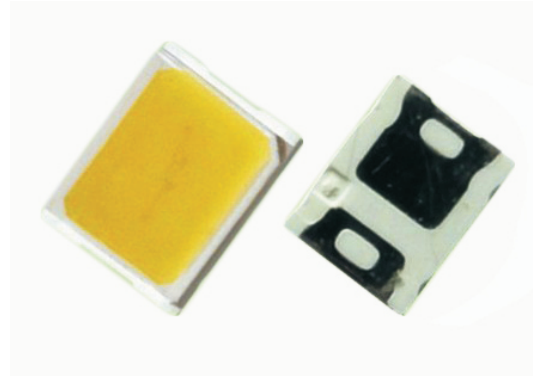


## LED Series

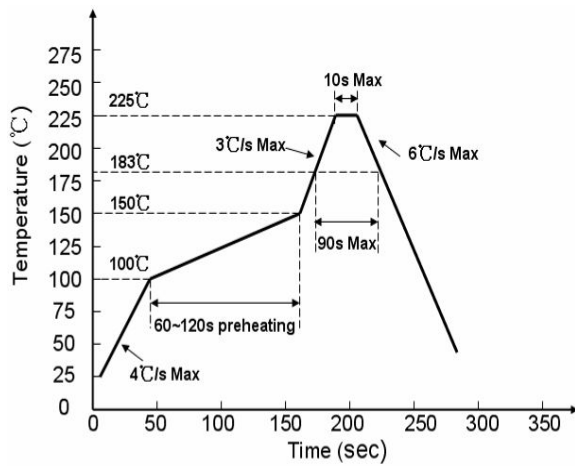
KLS9-S2835      SMD Top Lighting LED 2.8\*3.5mm

### Features:

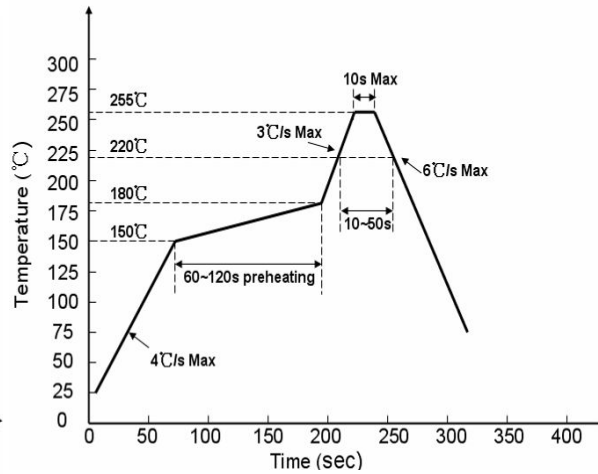
- Package (L/W/H) : 2.8x3.5x0.8 mm
- Color: Ultra Bright Warm White/Ultra Bright White
- Lens: Yellow Diffuse Flat Mold
- EIA STD Package
- Meet ROHS, Green Product
- Compatible With SMT Automatic Equipment
- Compatible With Infrared Reflow Solder And Wave Solder Process



## LED Series



For Lead Solder



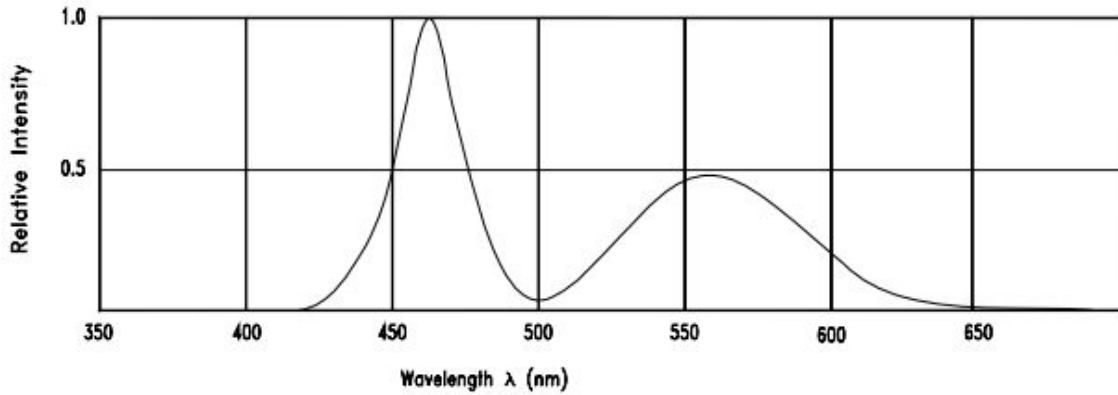
For Lead Free Solder

Absolute Maximum Ratings At Ta=25°			
Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	230	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms PulseWidth)	IFP	230	mA
DC Forward Current	IF	60	mA
Reverse Voltage	VR	5	V
Operating Temperature Range	Topr	-30°C ~ +85°C	
Storage Temperature Range	Tstg	-40°C ~ +90°C	
Soldering Condition	Tsol	Reflow soldering : 260°C For 5 Seconds Hand soldering : 300°C For 3 Seconds	

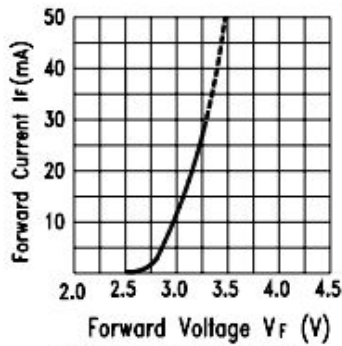
Electrical Optical Characteristics At Ta=25°C						
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	LM	20	22	--	LM	IF = 60mA
Viewing Angle	2θ1/2	--	120	--	deg	
CIE 1931 Coordinate	X		0.40	--	nm	
	Y	--	0.40	--	nm	
Spectral Line Half-Width	Δλ		--	--	nm	
Forward Voltage	VF	3.0	3.4	3.9	V	
Reverse Current	IR	--	--	10	μA	VR = 5V

**LED Series**

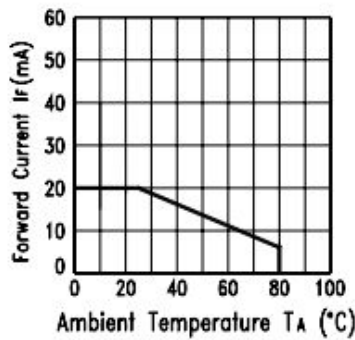
**Typical Electrical-Optical Characteristics Curves**



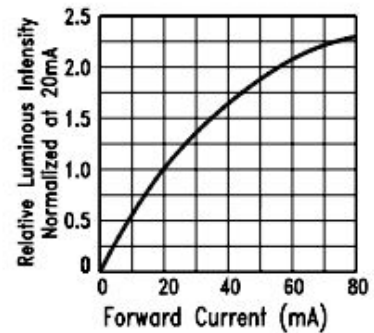
**Fig.1 Relative Intensity vs. Wavelength**



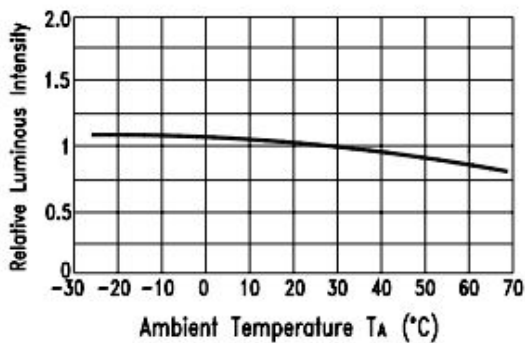
**Fig.2 Forward Current vs. Forward Voltage**



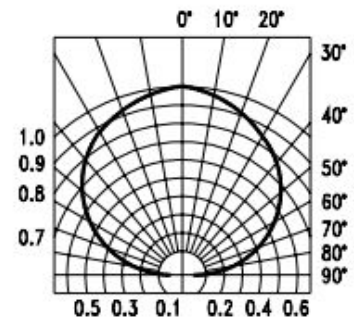
**Fig.3 Forward Current Derating Curve**



**Fig.4 Relative Luminous Intensity vs. Forward Current**



**Fig.5 Luminous Intensity vs. Ambient Temperature**



**Fig.6 Spatial Distribution**