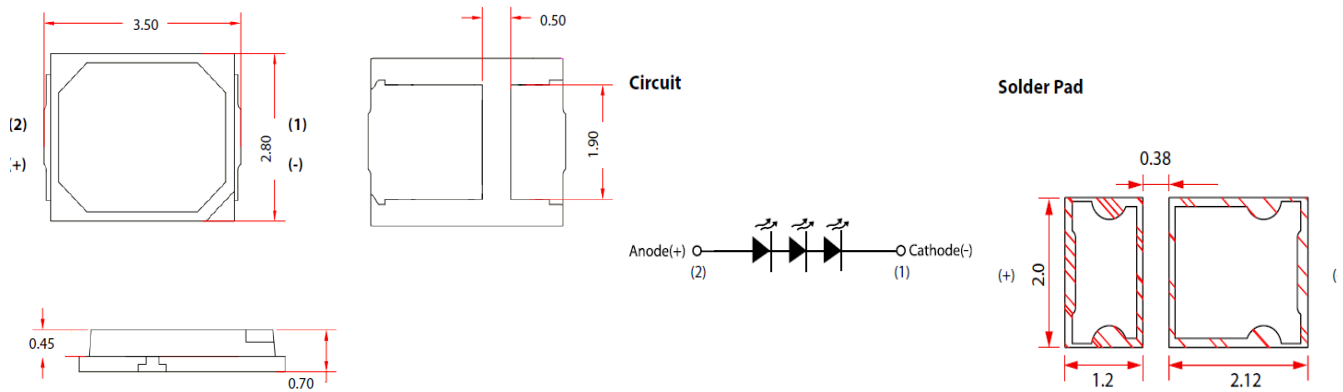
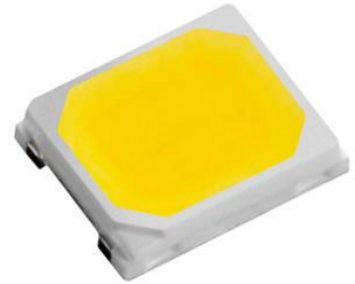


# Datasheet No.145 SMD LED KL5L2835W 1W 9V 100mA

## Features:

- Popular 2835W Package with Thermal pad
- Wide Viewing angle
- Suitable for Reflow Solder Process & SMT Assembly
- Available on Tape and Reel
- RoHS compliant (RoHS)



## Luminous Flux Characteristic IF = 100mA and TJ = 25°C

Lumens bin	Min. Luminous flux (Lm)	Max. Luminous flux (Lm)	Forward Current (mA)	CRI
100-110	100	110	100mA	80
110-120	110	120		
120-130*	120	130		
130-140	130	140		

## Correlated Color Temperature (CCT)

White	Warm White	Natural White
<b>W1</b> 5700-6000K	<b>T1</b> 2700-2900K	<b>S1</b> 3700-3900K
<b>W2</b> 6000-6500K	<b>T2</b> 2900-3000K	<b>S2</b> 3900-4000K
<b>W3</b> 6500-7000K	<b>T3</b> 3000-3300K	<b>S3</b> 4000-4300K

## Voltage Bin Structure

Group	Min.Voltage (V)	Max. Voltage (V)
V1	8.6	8.6-8.8-9.0
V2	9.0	9.0-9.2-9.4
V3	9.4	9.4-9.6-9.8

## Characteristics at 100mA Test Current

Parameter	Symbol	Value	Units
Viewing Angle (TYP)	$2\Theta_{1/2}$	120	Degree
Thermal resistance	-Rt	10	°C/W
CRI	Ra	>80	-
Lumens *	$\Phi_v$	100-110-120-130-140	Lumens
Color Correlated Temperature CCT *	<b>CCT</b>	2700-6500	K

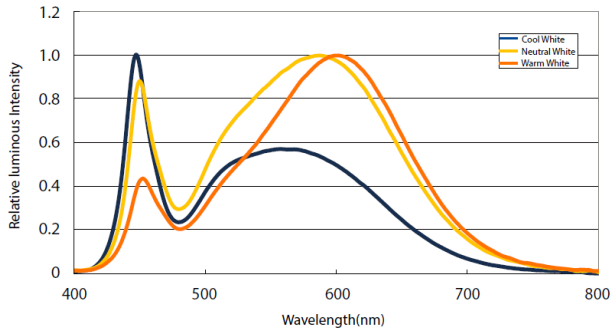
\* -please specify your range value for IV & CCT

## Absolute Maximum Ratings (Ta=25oC)

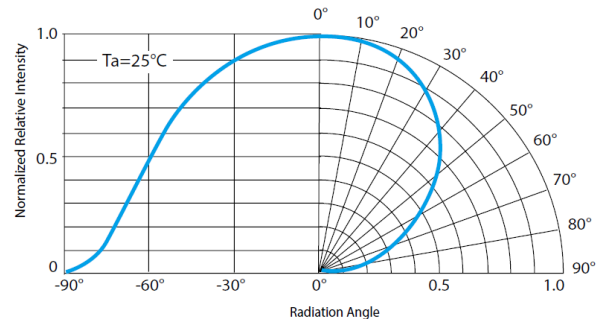
Parameter	Symbol	Value	Units
Forward current	$I_F$	120	mA
Pulse Forward Current	$I_{pulse}$	150	mA
Reverse Current	$I_R$	10	$\mu$ A
Reverse Voltage	$V_R$	5	V
Operating temperature	-	-40~+85	°C
Storage Temperature	-	-40~+125	°C
LED Junction Temperature	$T_j$	125	°C
ESD Sensitivity (HBM)	$V_B$	2000	V
Soldering temperature	$T_s$	<b>Reflow Soldering : 255~260°C/10~30sec</b> <b>Manual Soldering : 350 °C/3sec</b>	

# Characteristic Curves

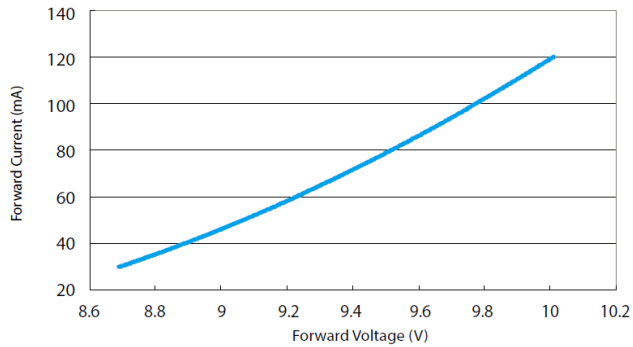
**Color Spectrum (80CRI)**



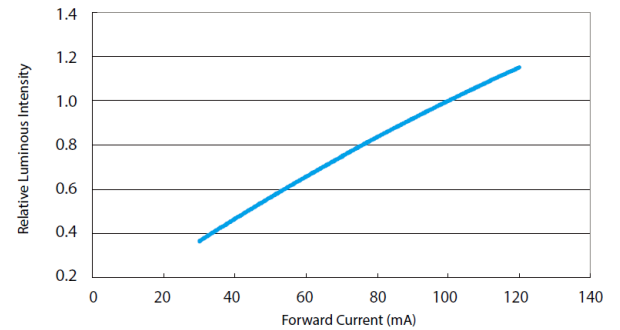
**Beam Pattern**



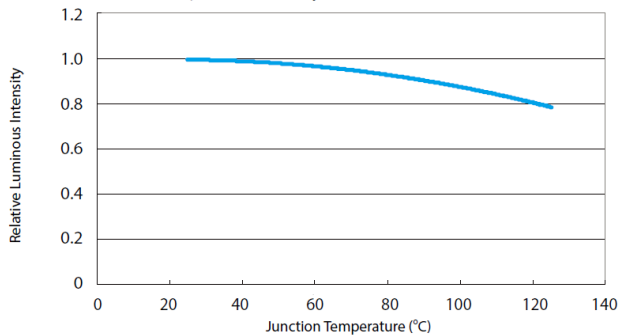
**Forward Current vs. Forward Voltage**



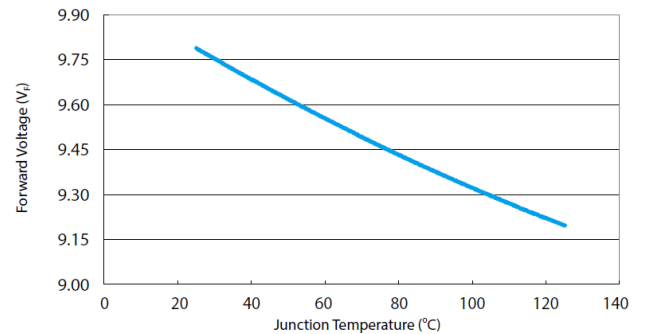
**Relative Luminous Intensity vs. Forward Current**



**Relative Luminous Flux vs. junction Temperature**



**Forward Voltage vs. Junction Temperature**





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