

SE-SMD2835-663R5

2835 SMD 663nm Rot

◇ **Features:**

- 2.8mm×3.5mm SMT LED, 0.83mm thickness
- PLCC-2 package
- White package
- Suitable for all SMT assembly and solder process
- Available on tape and reel



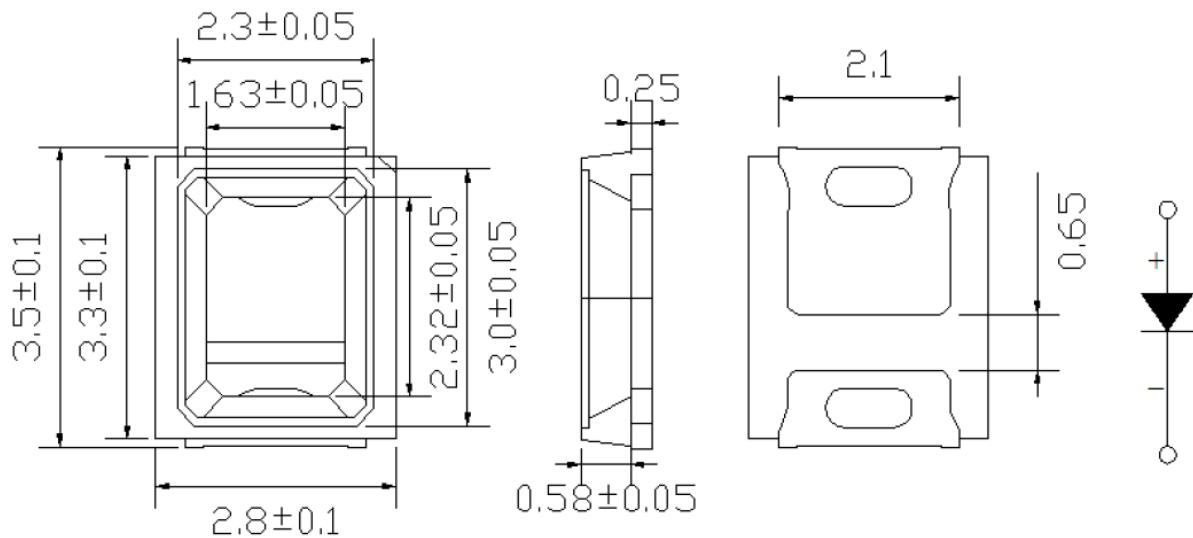
◇ **Description**

The Red source color devices are made with AlGaInP on sapphire Light Emitting Diode.

◇ **Application**

- Optical indicator
- Indicator and backlighting in telephone and fax
- Flat backlight for LCD, switch and symbol
- Light pipe application
- General use

◇ **Package Dimensions**



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Emitted Color	Len's Color	Chip Material
Red	Water clear	AlGaInP

❖ **Absolute Maximum Ratings(Ta=25°C)**

Item	Symbol	Maximum	Unit
Power Dissipation	PD	500	mW
Continuous Forward Current	I _{Fmax}	150	mA
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	I _{FP}	200	mA
Reverse Voltage	V _R	5	V
Operating Temperature Range	T _{opr}	-40 to+85	°C
Storage Temperature Range	T _{stg}	-40 to+100	°C

❖ **Electrical/Optical Characteristics(Ta=25°C)**

Item	Symbol	Condition	Min.	Typ.	Max	Unit
Forward Voltage	V _F	I _F =150mA	1.8	2.1	2.6	V
Luminous Flux	I _o	I _F =150mA	2	3	4	lm
Wavelength	λd	I _F =150mA	640	645	650	nm
Peak Wavelength	λp	I _F =150mA	652	663	700	nm
Viewing Angle	2 $\theta_{1/2}$	I _F =150mA	--	120	--	Deg
Capacitance	C	V _F =0V, f=1MHZ	--	110	--	pF
Reverse Current	I _R	V _R =5V	--	5	10	uA

✧ Typical Electro-Optical Characteristics Curves

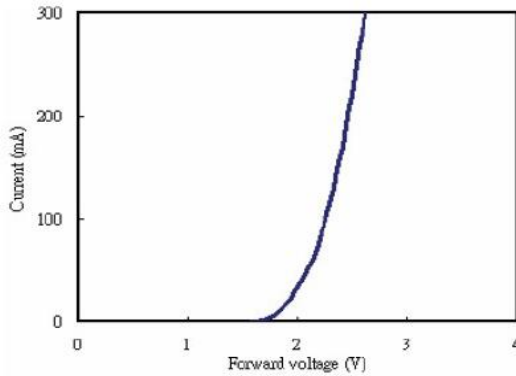


Fig.1 The I-V characteristics (0-300mA)

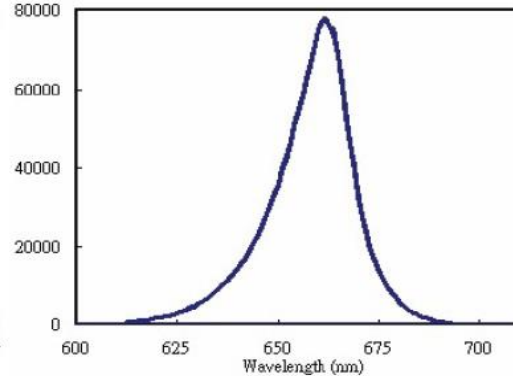


Fig.2 The EL spectrum

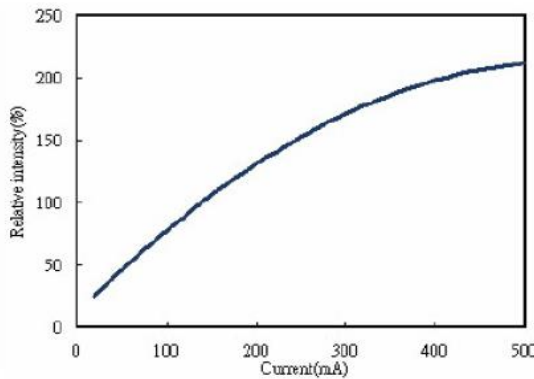


Fig.3 Relative intensity vs forward current

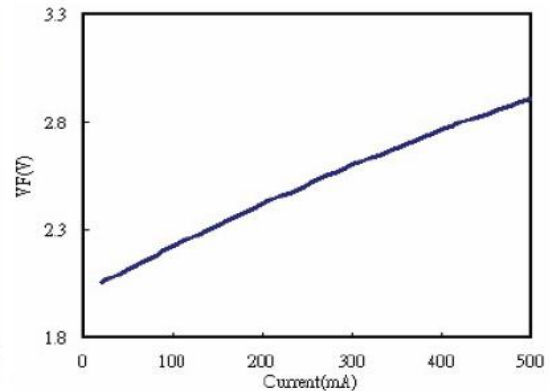


Fig.4 The V-I characteristics (0-500mA)

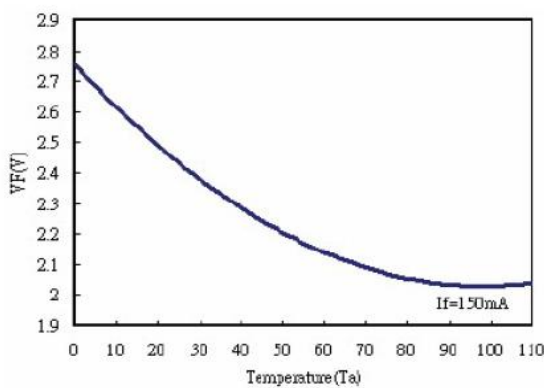


Fig.9 The forward voltage vs Ta(°C)

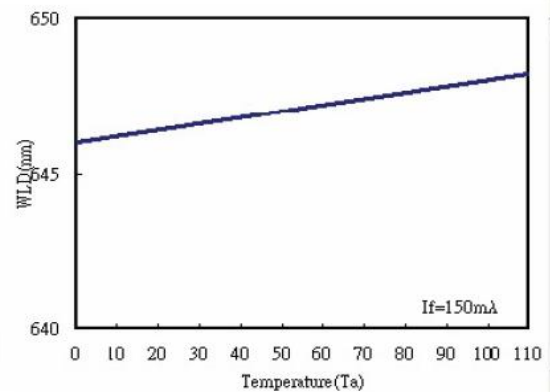


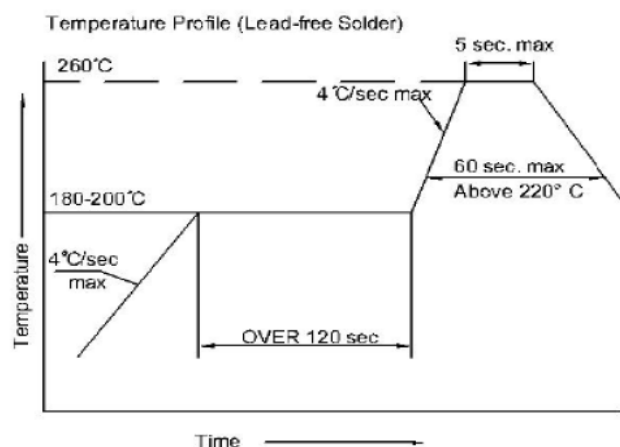
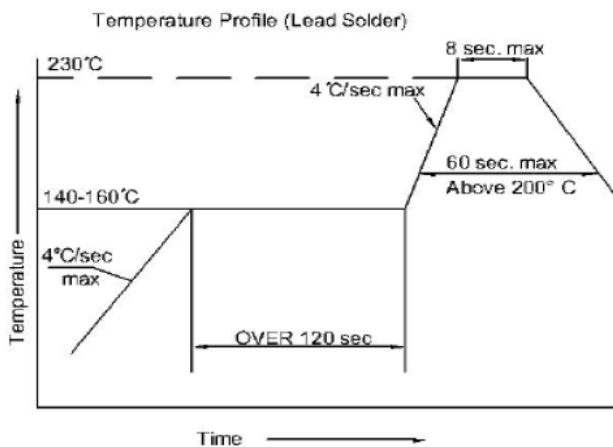
Fig.10 The WLD shift vs Ta(°C)

◇ Reliability Test Items And Conditions

NO.	Item	Test Condition	Test Hr/cycle/time	Sample Q'ty	Ac/Re
1	Reflow	TEMP:260±5°C; Min.5Sec	6 min	22pcs	0/1
2	Temperature Cycle	H:+100°C 15mins To(5mins) L:-40°C 15mins	300 cycles	22pcs	0/1
3	Thermal Shock	H:+100°C 15mins To(5mins) L:-40°C 15mins	300 cycles	22pcs	0/1
4	High Temperature Storage	TEMP:+260°C	1000hrs	22pcs	0/1
5	Low Temperature Storage	TEMP:-40°C	1000hrs	22pcs	0/1
6	DC Operating Life	IF=20MA	1000hrs	22pcs	0/1
7	High Temperature	85°C	1000hrs	22pcs	0/1
8	High Humidity	85%R.H.	1000hrs	22pcs	0/1

◇ SMT Reflow Soldering Instructions

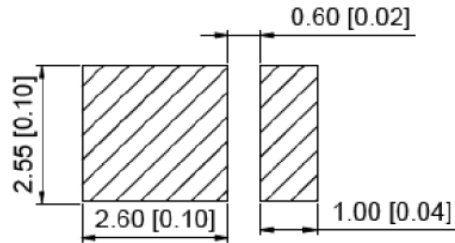
Number of reflow process shall be than 2 times and cooling
Process to normal temperature is required between first and second
soldering process



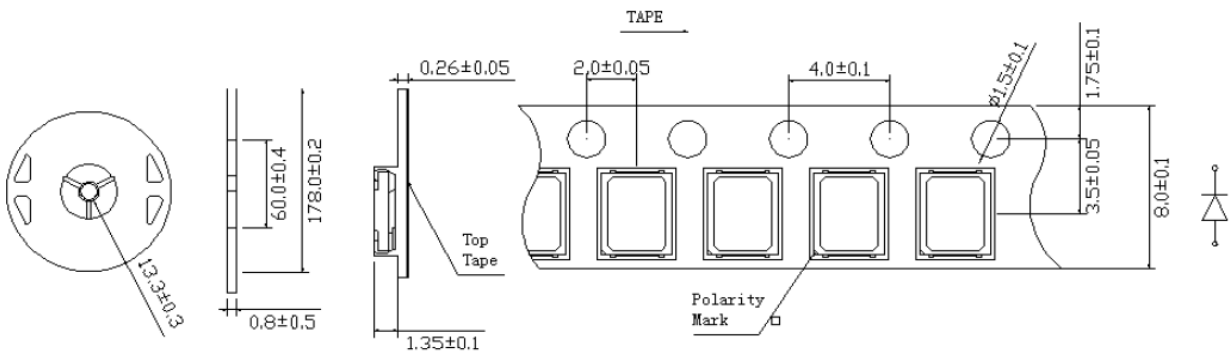
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❖ Recommended Soldering Pad Dimensions



❖ Tape Specification: 3,000PCS per reel



❖ Package Label