

# Specification for approval

We are please in sending you herewith our specification and drawings for your approval.  
Please return to us one copy "For Approval" with your approved signatures.

<b>Customer Name</b>	
<b>Director</b>	
<b>Part NO.</b>	LED DISPLAY
<b>Model.</b>	SSE2822RWB-A
<b>Emitted Color</b>	Red
<b>Byte height and digits</b>	0.28 in 2 digits
<b>Panel color</b>	Black
<b>Polarity</b>	common anode
<b>Colloid Color</b>	White diffused

## —. Characteristics

- ★Lower working voltage and current
- ★Lighting answering Time  $<0.1\mu\text{s}$ , better high frequency, chromaticity uniformity, high brightness
- ★Smaller volume, lighter weight, better impact resistance, solid sealing, good steady.
- ★Long life for 50,000 hours.
- ★Keep scanning and driving every segment continuously.
- ★Better show-effect and wider visual angle.
- ★Recommend constant current driver.
- ★Protective coating, and rip off when using.
- ★Solder temperature:  $260^{\circ}\text{C}$ , and stay time less than 5 seconds.
- ★For operation above  $25^{\circ}\text{C}$ , The  $I_{\text{fm}}$   $I_{\text{fp}}$  &  $P_{\text{d}}$  must be derated, the Current derating is  $-0.36\text{mA}/^{\circ}\text{C}$  for DC drive and  $-0.86\text{mA}/^{\circ}\text{C}$  for pulse drive, the power dissipation is  $-0.75\text{mW}/^{\circ}\text{C}$ . The product working current must not more than the 60% of the  $I_{\text{fm}}$  or  $I_{\text{fp}}$  according to the working temperature.
- ★Electrostatic prevention for Blue, Pure Green and White ones.

## 二. Limited Parameters

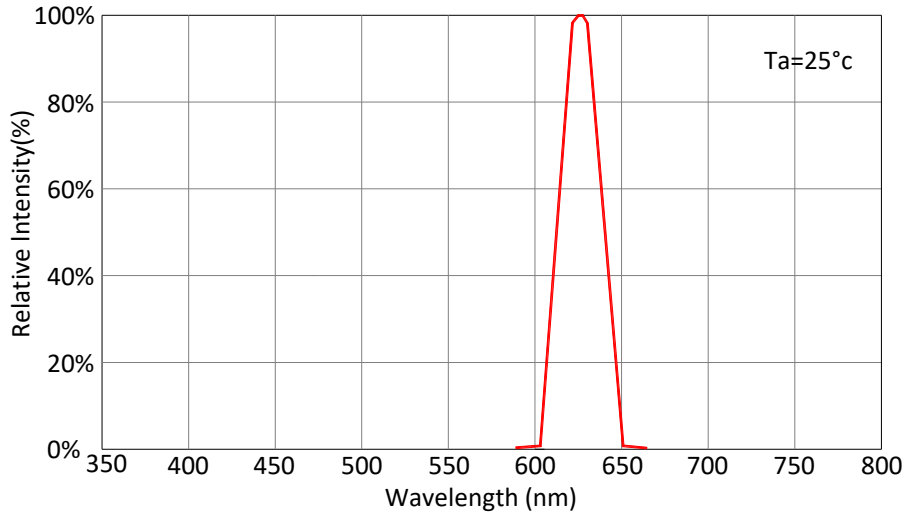
Parameters	Symbol	Limited parameter
Peak Forward Current	I <sub>fp</sub>	100mA
Continuous Forward Current	I <sub>f</sub>	30mA
Reverse Voltage	V <sub>r</sub>	5V
Operating temperature Rang	T <sub>opr</sub>	-30 to +70°C
Storage temperature Range	T <sub>stg</sub>	-40 to +85°C

## 三. Photoelectric Parameters

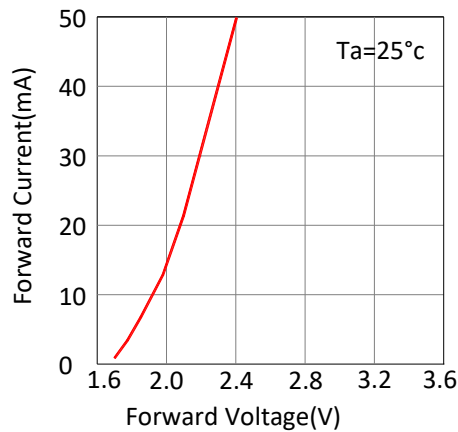
Parmeter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>	70.0	-	90.0	mcd	I <sub>F</sub> =20mA
Peak Wavelength	λ <sub>p</sub>	-	630	-	nm	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>	620	625	630	nm	I <sub>F</sub> =20mA
CIE Coordinates	x,y	-	-	-	-	I <sub>F</sub> =20mA
Radiation Bandwidth	Δλ	-	-	-	nm	I <sub>F</sub> =20mA
Forward Voltage	V <sub>F</sub>	1.90	2.20	2.40	v	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	-	-	10	uA	V <sub>R</sub> =5V

#### 四. Typical electro-optical Characteristics Curves

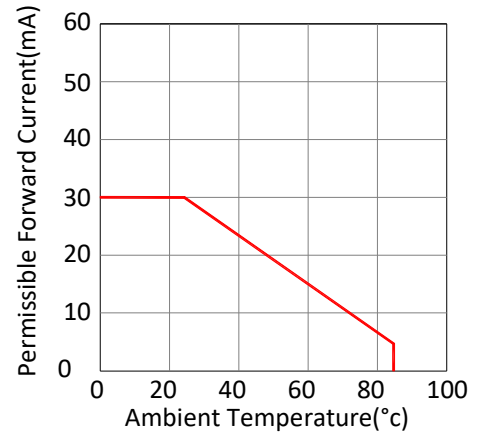
Relative Intensity vs. Wavelength



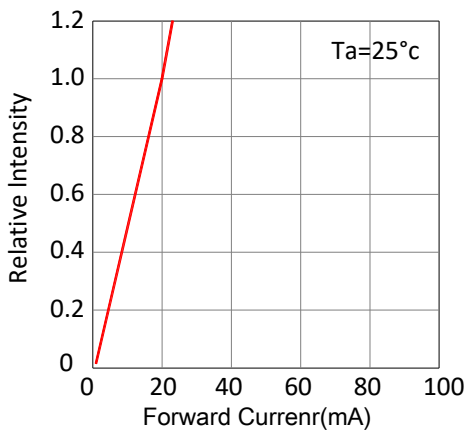
Forward Current vs. Forward Voltage



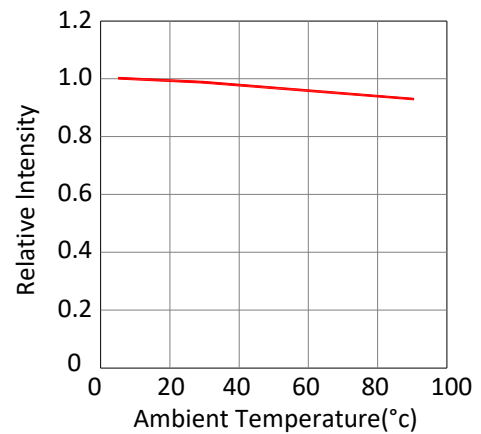
Forward Current vs. Ambient Temperature



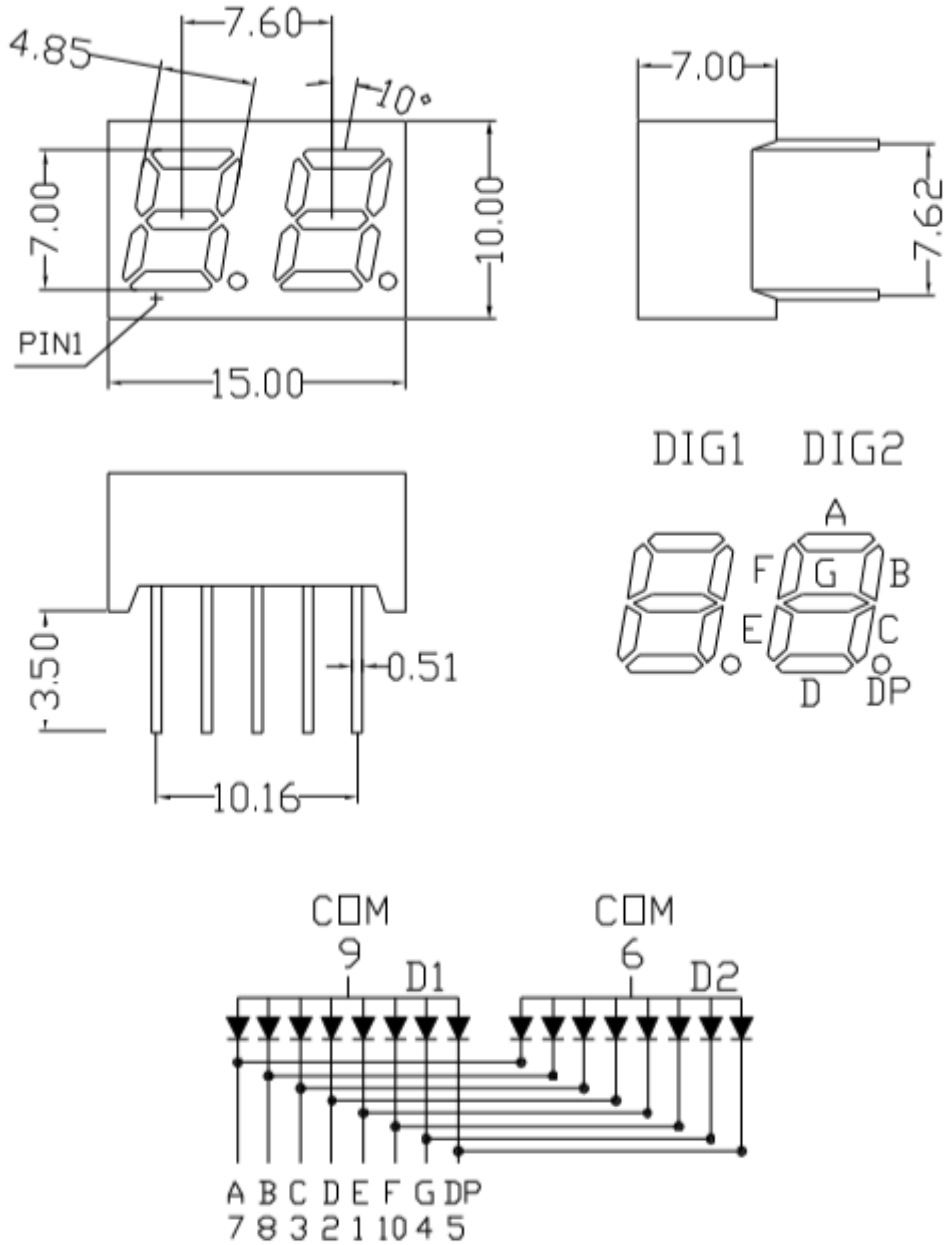
Relative Intensity vs. Forward Current



Relative Intensity vs. Ambient Temperature



五. Figure Size & Circuit Principle Diagram



NOTES :

1. All dimensions are in millimeters
2. Tolerances are  $\pm 0.2\text{mm}$  unless otherwise noted

## 六. Soldering

1. Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
2. Peak wave soldering temperature between 245°C ~ 255°C for 3 sec (5 sec max).
3. Do not apply stress to the epoxy resin while the temperature is above 85°C.
4. Fixtures should not incur stress on the component when mounting and during soldering process.
5. SAC 305 solder alloy is recommended.
6. No more than one wave soldering pass.
7. During wave soldering, the PCB top-surface temperature should be kept below 105°C

