SHENZHEN ATFU ELECTRONICS TECHNOLOGY CO.,LTD

SPECIFICATION FOR APPROVAL

客户名称（Customer Name）:	
客户料号（Customer NO.）:	
产品名称（Product Name）:	1 Digit 0.20 inch Red color SMD display
产品型号（Product No.）:	AT-1-201SRBX-SMT
制定日期（Date Prepared）:	2014-06-25

CUSTOMER CONFIRMATION			

SUPPLIER CONFIRMATION	
Designed by	
Check by	
Approval by	
Date	

SHENZHEN ATFU ELECTRONICS TECHNOLOGY CO.,LIMITED
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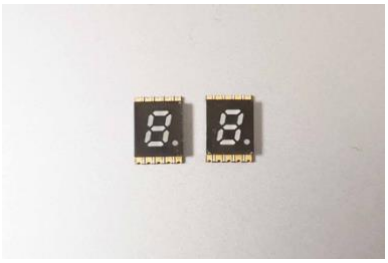
Tel: (+86) 755 82558654 **Email:** sales@atfucomponents.com

◆ **Features:**



1. 1 Digit 0.20 inch SMD display.
2. Thinner than tradition display, Package in 3.00mm height.
3. Industrial standard size.
4. Low power consumption.
5. black and gray surface options.
6. Customized color available.
7. Packaged in tape and reel for SMT manufacturing.
8. Categorized for luminous intensity.
9. The product itself will remain within RoHS compliant Version.

◆ **Applications:**

1. Home appliances
2. Game machine
3. Instrument panels
4. Digital readout displays

◆ **Device Selection Guide**

Prodcut No.	Emitting Color	Polarity
AT-1-201SRBA-SMT	Hyper Red	Common Cathode
AT-1-201SRBC-SMT	Hyper Red	Common Anode

◆ **Absolute Maximum Ratings at Ta=25℃**

Parameters	Symbol	Max.	Unit
Power Dissipation	P_D	60	mW
Peak Forward Current	I_{FP}	100	mA
Forward Current	I_F	25	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{opr}	-40℃ to +80℃	
Storage Temperature Range	T_{stg}	-40℃ to +85℃	
Soldering Temperature	T_{sld}	260℃ for 5 Seconds	

◆ **Electrical Optical Characteristics at Ta=25℃**

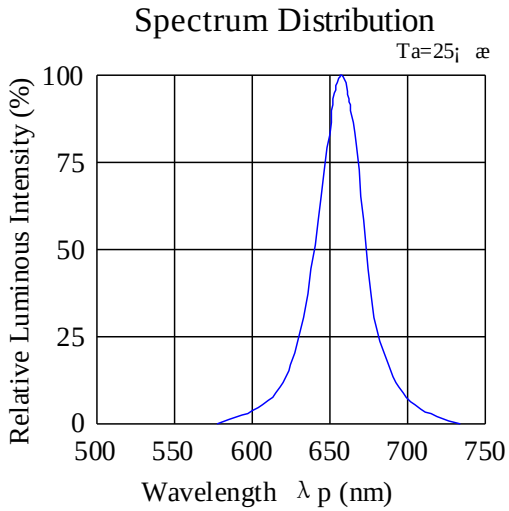
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	9.0	12.0	---	mcd	IF=20mA (Note 1)
Peak Emission Wavelength	λp	---	630	---	nm	IF=20mA
Dominant Wavelength	λd	---	625	---	nm	IF=20mA (Note 2)
Spectral Line Half-Width	Δλ	---	20	---	nm	IF=20mA
Forward Voltage	VF	---	1.80	2.40	V	IF=20mA
Reverse Current	IR	---	---	50	μA	VR=5V

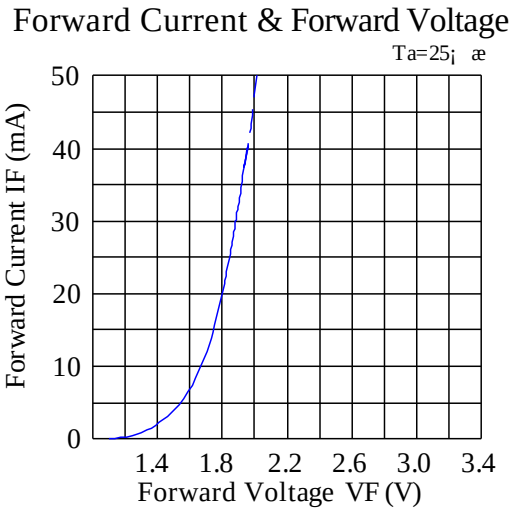
Notes:

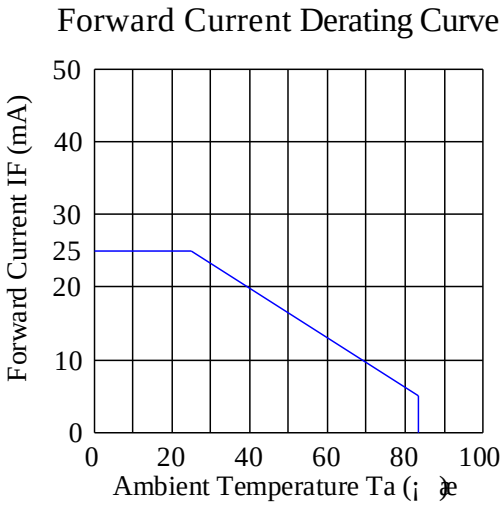
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. The dominant wavelength (λd) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

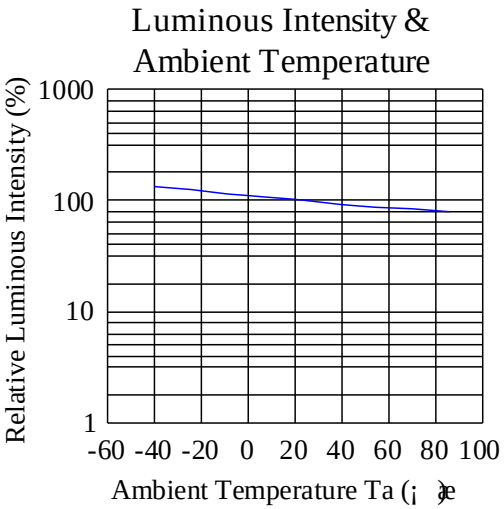
◆ Typical Electrical / Optical Characteristics Curves

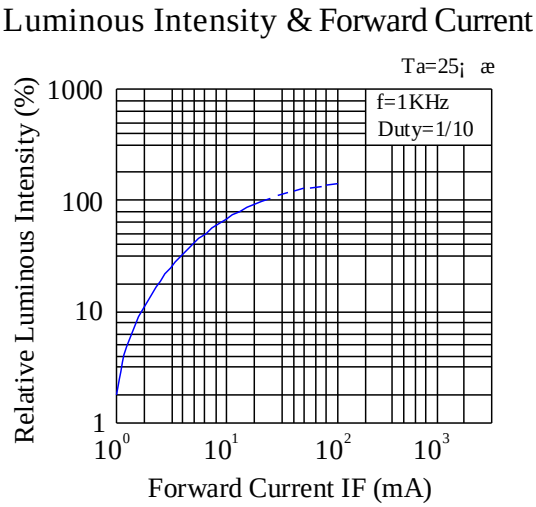
(25℃ Ambient Temperature Unless Otherwise Noted)



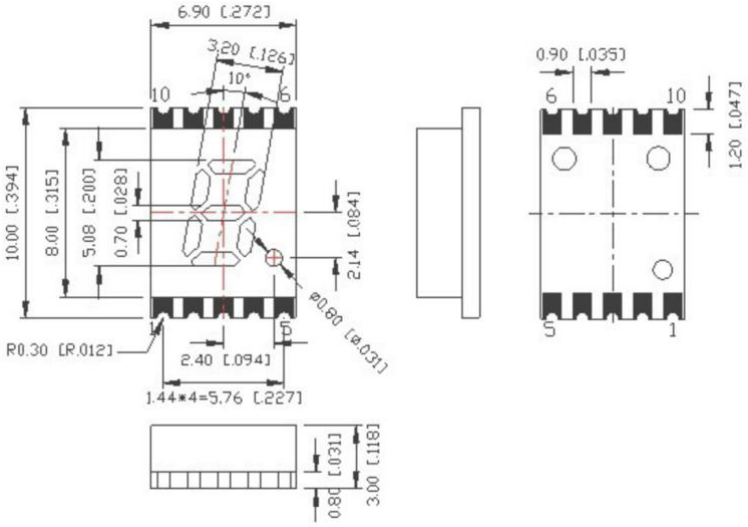




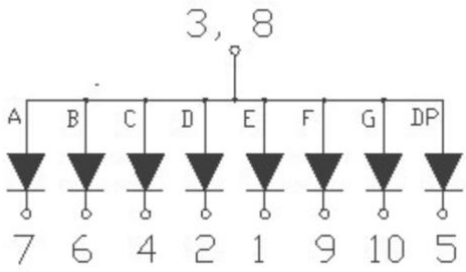




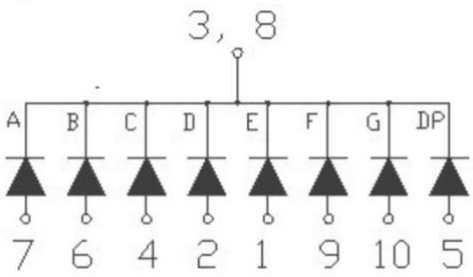
◆ **Outline dimensions**



◆ **Internal Circuit Diagram**

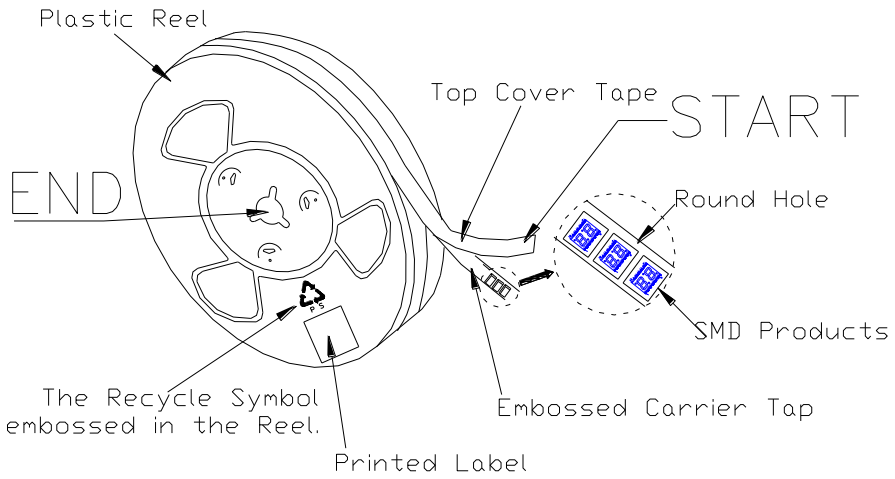


AT-1-201SRBA-SMT (Common Anode)



AT-1-201SRBC-SMT (Common Cathode)

◆ **Label Direction & Content In The Roll**



1. Total unit per reel is 1000PCS.

◆ **Please read the following notes before using the datasheets:**

1. Over-current-proof

   Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen).

2. Storage

   2.1 Do not open moisture proof bag before the products are ready to use.

   2.2 Before opening the package, the LEDs should be kept at 30℃ or less and 90%RH or less.

   2.3 The LEDs should be used within a year.

   2.4 After opening the package, the LEDs should be kept at 30℃ or less and 70%RH or less.

3. Soldering Condition

   3.1 Pb-free solder temperature profile.

   3.2 Reflow soldering should not be done more than two times.

4. Soldering Iron

   Each terminal is to go to the tip of soldering iron temperature less than 260℃ for 5 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.

5. Repairing

   Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used. It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.