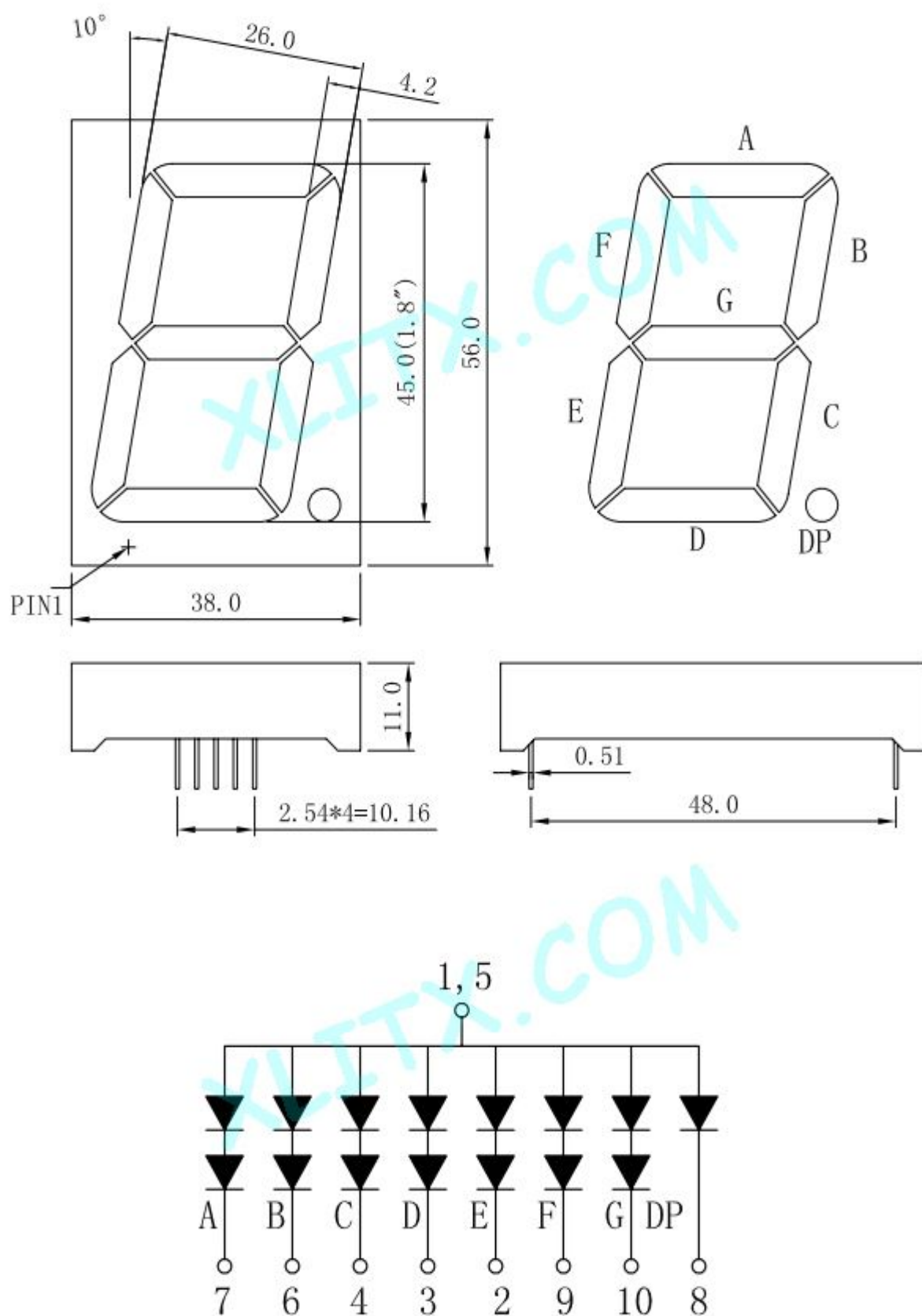




**Model :** 18102BS  
**Size :** 1.80-inch  
**Emitting color :** Red (Ultra-Bright )  
**Mode :** Common-Anode (CA)  
**Digit :** 1-Digit  
**Category :** LED 7-Segment Display  
**Maker :** XLITX Technology

**Prices :** \$1.62 = 50 Pieces    \$0.86 = 300 Pieces    \$0.83 = 600 Pieces    (Free shipping)

## Dimension & Diagram



## Ultra-Bright Red Electro-Optical Parameter

### 1. Electro-Optical Characteristics(Ta=25℃)

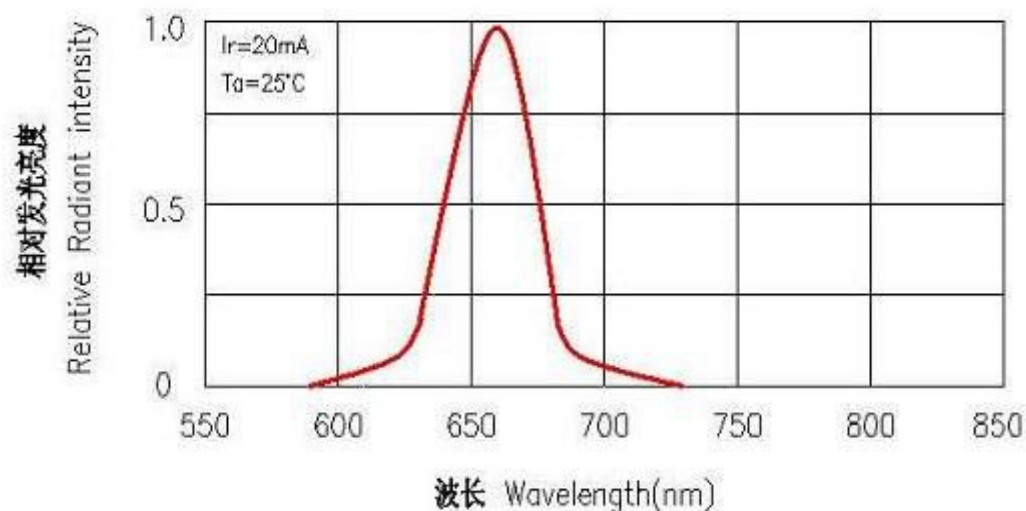
| PARAMETER                                                     | SYMBOL      | DEVICES<br>( ULTRA-BRIGHT RED ) |     | UNIT    | TEST CONDIONS |
|---------------------------------------------------------------|-------------|---------------------------------|-----|---------|---------------|
|                                                               |             | TYP                             | MAX |         |               |
| Peak Emission Wavelength                                      | $\lambda_p$ | 640                             |     | nm      | IF=10mA       |
| Forward Voltage                                               | VF          | 1.8                             |     | V       | IF=10mA       |
| Reverse Current                                               | IR          |                                 | 50  | $\mu$ A | VR=5V         |
| Segment To Segment (Dot To Dot)<br>Luminonous Intensity Ratio | IV-M        | 1.5:1                           |     |         | IF=20         |

### 2. Absolute Maximun Ratings(Ta=25℃)

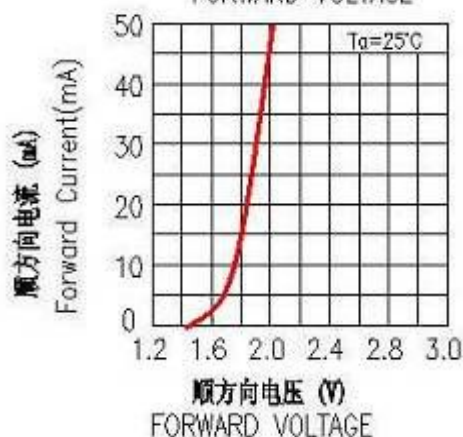
| PARAMETER                                                 | SYMBOL | DEVICES<br>( ULTRA-BRIGHT RED )                       | UNIT |
|-----------------------------------------------------------|--------|-------------------------------------------------------|------|
| Power Dissipation Per Dice                                | pad    | 100                                                   | mw   |
| Derating Linear From 25℃ Per Dice                         |        | 0.5                                                   | mA/℃ |
| Continuous Forward Current Per Dice                       | laf    | 30                                                    | mA   |
| Peak Forward Ourrent Per Dice<br>( Duty Cycle 1/10,10KHz) | lpf    | 200                                                   | mA   |
| Reverse Voltage Per Dice                                  | Vr     | 5                                                     | V    |
| Operating Temperature                                     | Topr   | -20℃ (to) +75℃                                        |      |
| Storage Temperature                                       | Tstg   | -20℃ (to) +85℃                                        |      |
| Solder Temperature                                        |        | 1.6 Inch Below Seating Place for<br>5 seconds at 230℃ |      |

### 3. Electro-Optical Curve

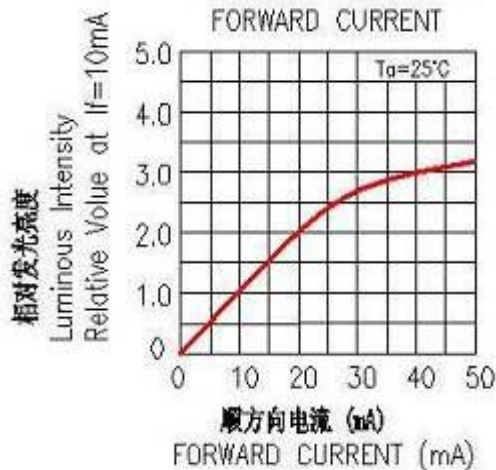
相对亮度与波长 RELATIVE INTENSITY VS WAVELENGTH



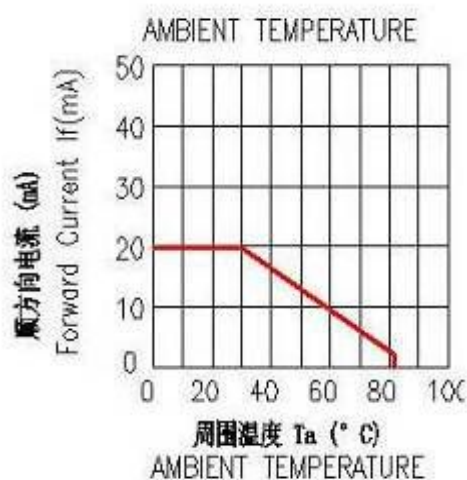
顺电流-顺电压特性  
FORWARD CURRENT VS  
FORWARD VOLTAGE



相对光度-顺电流特性  
LUMINOUS INTENSITY VS  
FORWARD CURRENT



允许顺电流-周围温度特性



相对光度-周围温度特性  
LUMINOUS INTENSITY VS  
AMBIENT TEMPERATURE

