

## TOSHIBA LED DISPLAY

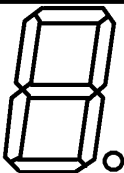
**TLG346T, TLG347T, TLS346T  
TLS347T, TLR346T, TLR347T**

- 10mm (0.4") Character Height Numerical Display.
- Application : Numerical Readout for Instrument and Consumer Product.
- Luminous Intensity Ranking Performed Uniform Display.
- Available Both Types of Package Colors.  
 TL□xxxS : Gray Color Coated Only on Surface.  
 TL□xxxT : Black Color Coated Only on Surface.

## PRODUCT LINE UP

|                   |           |
|-------------------|-----------|
| TLG346T / TLG347T | GaP GREEN |
| TLS346T / TLS347T | GaAsP RED |
| TLR346T / TLR347T | GaP RED   |

## TYPE No. vs FULLY DISPLAY FONT

| COMMON CATHODE                | COMMON ANODE                  | FULLY DISPLAY FONT                                                                  |
|-------------------------------|-------------------------------|-------------------------------------------------------------------------------------|
| TLG346T<br>TLS346T<br>TLR346T | TLG347T<br>TLS347T<br>TLR347T |  |

## MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC                      | SYMBOL                        | RATING | UNIT |
|-------------------------------------|-------------------------------|--------|------|
| DC Forward Current / seg.           | $I_F(\text{DC}) / \text{seg}$ | 20     | mA   |
| Pulse Forward Current / seg. (Note) | $I_{FP} / \text{seg}$         | 110    | mA   |
| Reverse Voltage / seg.              | $V_R$                         | 6      | V    |
| Operating Temperature Range         | $T_{opr}$                     | -40~85 | °C   |
| Storage Temperature Range           | $T_{stg}$                     | -40~85 | °C   |

Note : Pulse Width = 1ms, Duty Ratio = 1 / 10

## ELECTRICAL-OPTICAL CHARACTERISTICS (Ta = 25°C)

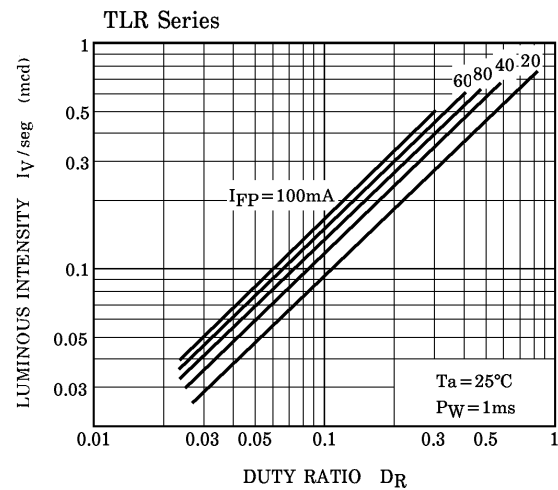
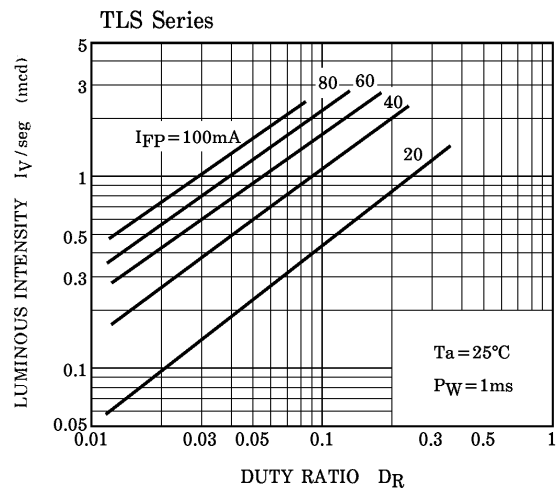
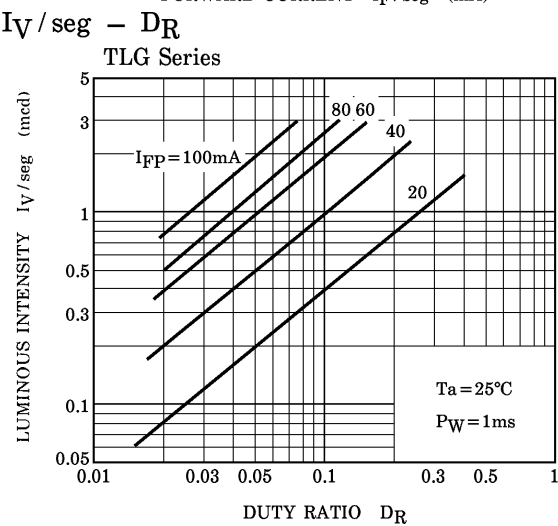
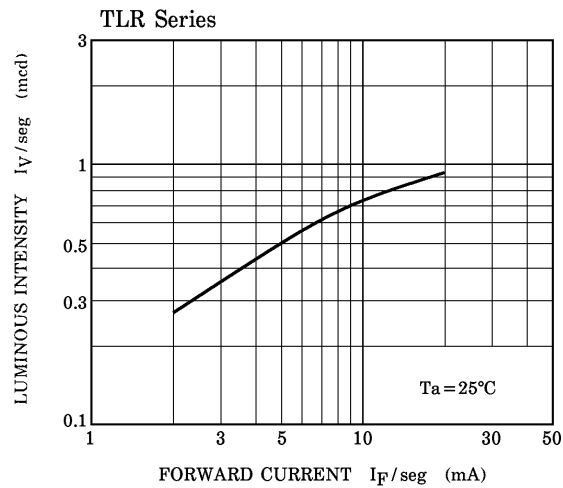
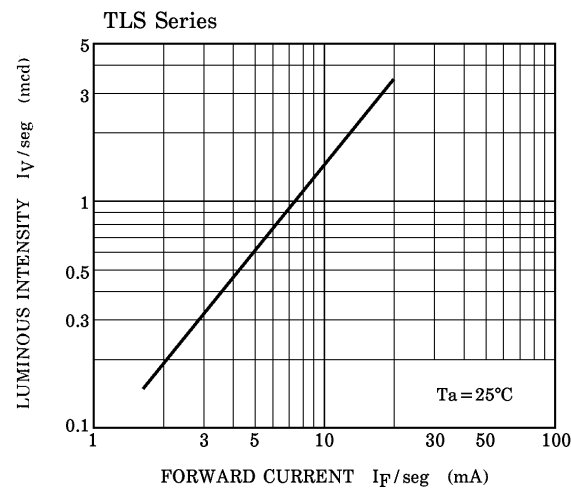
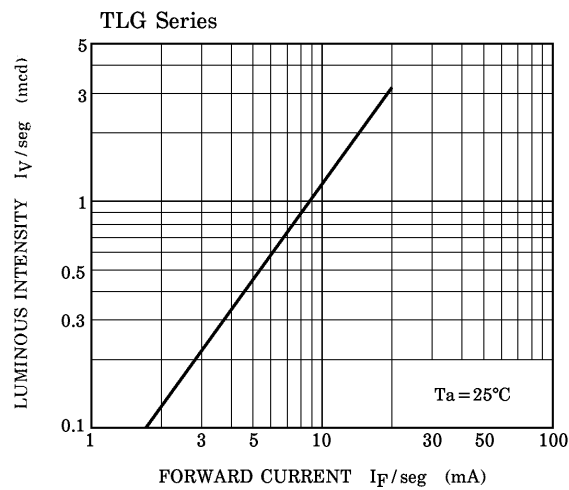
| TYPE No.   | EMITTING<br>WAVE LENGTH |                 |                     | LUMINOUS<br>INTENSITY<br>I <sub>V</sub> / seg |      |                     | FORWARD<br>VOLTAGE V <sub>F</sub> / seg |      |      |                     | REVERSE<br>CURRENT<br>I <sub>R</sub> / seg |                     | LUMINOUS<br>INTENSITY<br>MATCHING<br>RATIO I <sub>V-M</sub> |                     |
|------------|-------------------------|-----------------|---------------------|-----------------------------------------------|------|---------------------|-----------------------------------------|------|------|---------------------|--------------------------------------------|---------------------|-------------------------------------------------------------|---------------------|
|            | $\lambda_p$             | $\Delta\lambda$ | I <sub>F</sub> /seg | Min.                                          | Typ. | I <sub>F</sub> /seg | Min.                                    | Typ. | Max. | I <sub>F</sub> /seg | Max.                                       | V <sub>R</sub> /seg | Max.                                                        | I <sub>F</sub> /seg |
| TLG Series | 565                     | 30              | 10                  | 0.54                                          | 1.22 | 10                  | 1.7                                     | 2.0  | 2.5  | 10                  | 5                                          | 6                   | 2.3                                                         | 10                  |
| TLS Series | 635                     | 40              |                     | 0.72                                          | 1.64 |                     | 1.7                                     | 1.9  | 2.5  |                     |                                            |                     |                                                             |                     |
| TLR Series | 700                     | 100             |                     | 0.23                                          | 0.52 | 5                   | 1.4                                     | 2.0  | 2.5  |                     |                                            |                     |                                                             | 5                   |
| UNIT       | nm                      |                 | mA                  | mcd                                           |      | mA                  | V                                       |      |      | mA                  | $\mu$ A                                    | V                   | —                                                           | mA                  |

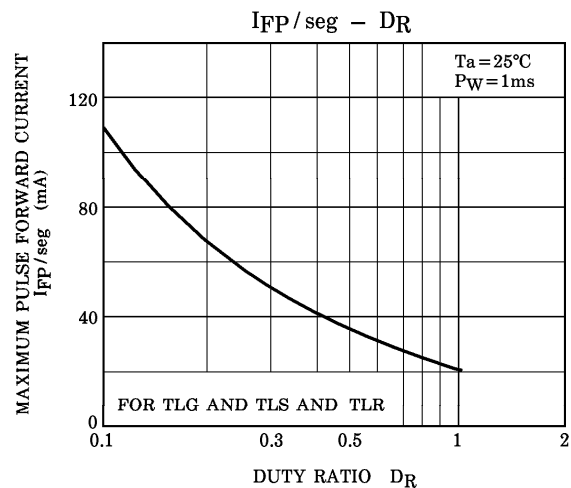
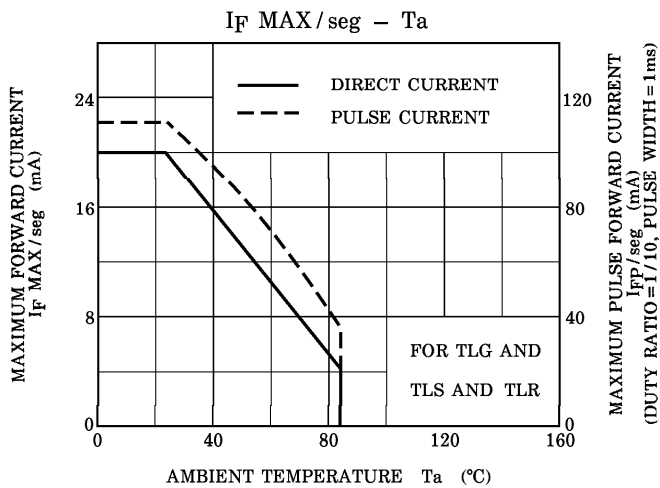
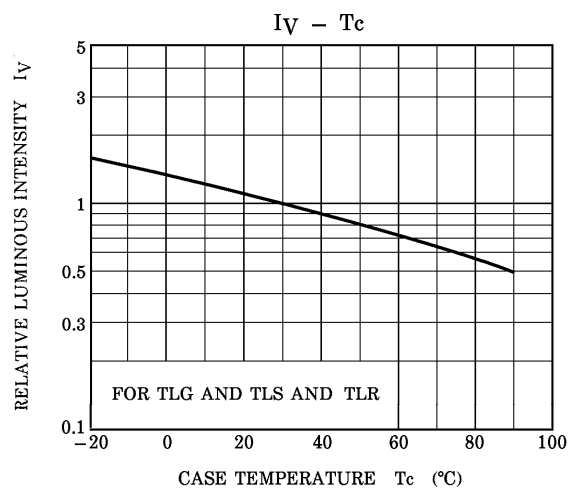
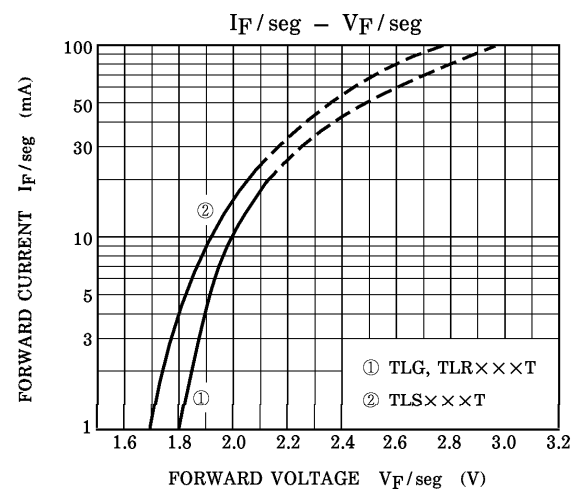
## PRECAUTION

Please be careful of the following.

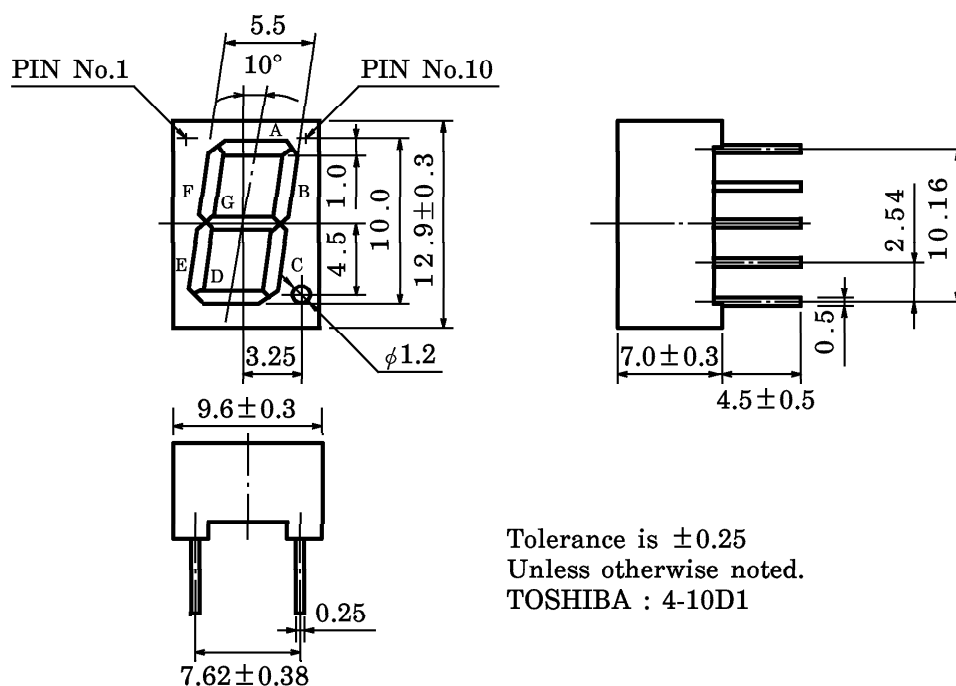
- Soldering temperature should be less than 260°C for 3 seconds at 2.0mm from the seating plane.

$I_V/\text{seg} - I_F$





OUTLINE DIMENSIONS



PIN CONNECTION

| 346T Series |                       | 347T Series |                         |
|-------------|-----------------------|-------------|-------------------------|
|             |                       |             |                         |
| PIN No.     | CONNECTION            | PIN No.     | CONNECTION              |
| 1           | Common Cathode        | 1           | Common Anode            |
| 2           | Anode F               | 2           | Cathode F               |
| 3           | Anode G               | 3           | Cathode G               |
| 4           | Anode E               | 4           | Cathode E               |
| 5           | Anode D               | 5           | Cathode D               |
| 6           | Common Cathode        | 6           | Common Anode            |
| 7           | Anode Dp (Right Hand) | 7           | Cathode Dp (Right Hand) |
| 8           | Anode C               | 8           | Cathode C               |
| 9           | Anode B               | 9           | Cathode B               |
| 10          | Anode A               | 10          | Cathode A               |

**RESTRICTIONS ON PRODUCT USE**

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