

9097250 TOSHIBA (DISCRETE/OPTO)

99D 17261 DT-41-33

## TLR2198, TLR4192, TLR2268, TLR4262

## RED COLOR 4 DIGITS LED DISPLAY

- For Duplex Drive connection and available both polarity common anode or common cathode.
- 15 mm (0.6") character height, each segment represents diffused and uniformly display.
- Outer color filter provides high contrast, practical brightness are obtained at about 20 mA (with 50 per cent duty ratio) per segments.
- Arrow edge shape of each segment represents not mosaic but look like Arabic numerals.
- Selectable both type 12 or 24 hours of display.

## TYPE NO. VS. DISPLAY FONT

| COMMON ANODE | COMMON CATHODE | FULLY DISPLAY FONT |
|--------------|----------------|--------------------|
| TLG2198      | TLG2268        | : 18:88.           |
| TLG4192      | TLG4262        | : 28:88.           |

Refer to page 260 for the figure.

MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

| CHARACTERISTIC                 | SYMBOL                         | RATING        | UNIT             |
|--------------------------------|--------------------------------|---------------|------------------|
| Pulse Forward Current (Note 1) | $I_F(\text{Pulse})/\text{Seg}$ | 30            | mA               |
| Reverse Voltage                | $V_R$                          | 3             | V                |
| Storage Temperature Range      | $T_{stg}$                      | $-20 \sim 75$ | $^\circ\text{C}$ |
| Operating Temperature Range    | $T_{opr}$                      | $-20 \sim 60$ | $^\circ\text{C}$ |
| Soldering Temperature (Note 2) | $T_{solder}$                   | 260           | $^\circ\text{C}$ |

Note 1: Duty ratio = 1/2

2: Within 3 second at 2 mm from the reflector edge.

ELECTRICAL-OPTICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

| CHARACTERISTICS                   | SYMBOL           | TEST CONDITION      | MIN. | TYP. | MAX. | UNIT          |
|-----------------------------------|------------------|---------------------|------|------|------|---------------|
| Forward Voltage                   | $V_F$            | $I_F = 20\text{mA}$ | 1.8  | 2.15 | 2.75 | V             |
| Reverse Current                   | $I_R$            | $V_R = 3\text{V}$   | -    | -    | 5    | $\mu\text{A}$ |
| Luminous Intensity/Seg.           | $I_V/\text{Seg}$ | $I_F = 10\text{mA}$ | 0.1  | 0.2  | -    | mcd           |
| Luminous Intensity Matching Ratio | $I_V/M$          | $I_F = 5\text{mA}$  | -    | -    | 2.5  | -             |
| Peak Emission Wave Length         | $\lambda_p$      | $I_F = 10\text{mA}$ | -    | 700  | -    | nm            |
| Spectral Half Line Width          | $\Delta\lambda$  | $I_F = 10\text{mA}$ | -    | 100  | -    | nm            |

