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NTE3118 Bar Graph Display 10-Segment

Description:

The NTE3118 is a 10-segment, 3 color bar graph display with separate anodes and cathodes for each light segment. This device contains 3 red segments, 3 orange segments, and 4 yellow-green segments on a single, end stackable black face package with white fields.

Features:

- 10 Fields 3 Color LED Display (Red / Orange / Yellow-Green, AlGaInP)
- High Intensity and Reliability
- High Quality, Low Power Requirement
- IC Compatible, Easy Assembly
- RoHS Compliant

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Power Dissipation (Per Segment), P_D 65mW
 Peak Forward Current (Per Segment, 1/10 Duty Cycle, 0.1ms Pulse Width), $I_{F(\text{peak})}$ 100mA
 Average Forward Current (Per Segment), $I_{F(\text{av})}$ 30mA
 Derate Linear from $+25^\circ\text{C}$ (Per Segment) 0.33mA/ $^\circ\text{C}$
 Reverse Voltage (Per Segment), V_R 5V
 Operating Temperature Range, T_{opr} -40° to $+105^\circ\text{C}$
 Storage Temperature Range, T_{stg} -40° to $+105^\circ\text{C}$
 Lead Temperature (During Soldering, 1.6mm from Body, 3sec max), T_L $+260^\circ\text{C}$

Electro-Optical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---------------------|-------------|---------------------|-----|-----|-----|---------------|
| Forward Voltage | V_F | $I_F = 20\text{mA}$ | 1.8 | - | 2.3 | V |
| Red | | | | | | |
| Orange | | | | | | |
| Yellow-Green | | | 1.8 | - | 2.3 | V |
| Reverse Current | I_R | $V_R = 5\text{V}$ | - | - | 5 | μA |
| Red | | | | | | |
| Orange | | | | | | |
| Yellow-Green | | | - | - | 5 | μA |
| Dominant Wavelength | λ_D | $I_F = 20\text{mA}$ | 630 | - | 635 | nm |
| Red | | | | | | |
| Orange | | | | | | |
| Yellow-Green | | | 565 | - | 575 | nm |

Rev. 11-22



Electro-Optical Characteristics (Cont'd): ($T_A = +25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|-----------------------------------|-----------------|---------------------|-----|-----|-----|------|
| Half Intensity Angle (All Colors) | $2\theta^{1/2}$ | $I_F = 20\text{mA}$ | - | 120 | - | deg |
| Luminous Intensity Red | I_V | $I_F = 20\text{mA}$ | - | 15 | - | mcd |
| Orange | | | - | 15 | - | mcd |
| Yellow-Green | | | - | 15 | - | mcd |

