



ELECTRONICS, INC.

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## NTE3068 thru NTE3071 0.4" Single Digit Numeric Display Seven Segment, RHDP

### Description:

The NTE3068 through NTE3071 are 0.4 inch (10.16mm) height single digit displays. The NTE3068 and NTE3069 devices utilize LED chips which are made from GaP on a transparent GaP substrate. The NTE3070 and NTE3071 devices utilize chips which are made from GaAsP on a transparent GaP substrate.

### Features:

- 0.4 Inch (10.16mm) Digit Height
- Continuous Uniform Segments
- Choice of Two Bright Colors:
  - Red – NTE3068, NTE3069
  - Orange – NTE3070, NTE3071
- Low Power Requirement
- Excellent Characters Appearance
- Catagorized for Luminous Intensity
- IC Compatible
- Easy Mounting on PC Board or Socket

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

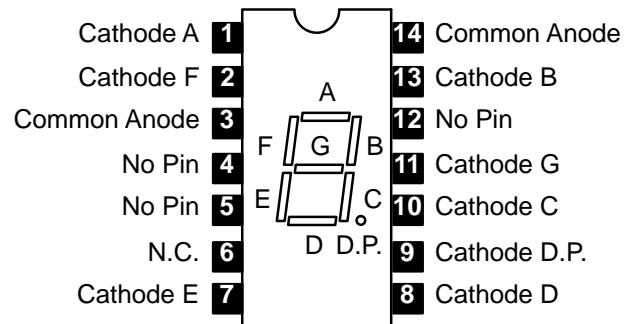
Power Dissipation (Per Segment), $P_T$	
NTE3068, NTE3069	55mW
NTE3070, NTE3071	75mW
Peak Forward Current (Per Segment, 1/10 Duty Cycle, 0.1ms Pulse Width), $I_{Fpeak}$	
NTE3068, NTE3069	160mA
NTE3070, NTE3071	100mA
Continuous Forward Current (Per Segment), $I_F$	25mA
Derate Linearly from $25^\circ\text{C}$ (Per Segment)	0.30mA/ $^\circ\text{C}$
Reverse Voltage (Per Segment), $V_R$	5V
Operating Temperature Range, $T_{opr}$	$-25^\circ$ to $+85^\circ\text{C}$
Storage Temperature Range, $T_{stg}$	$-25^\circ$ to $+85^\circ\text{C}$
Lead Temperatue (During Solder, 1/16" Below Seating Plane, 3sec max), $T_L$	$+260^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Average Luminous Intensity NTE3068, NTE3069	$I_V$	$I_F = 10\text{mA}$	200	500	–	$\mu\text{cd}$
NTE3070, NTE3071			850	2200	–	$\mu\text{cd}$
Peak Emission Wavelength NTE3068, NTE3069	$\lambda_P$	$I_F = 20\text{mA}$	–	655	–	nm
NTE3070, NTE3071			–	630	–	nm
Spectral Line Half-Width NTE3068, NTE3069	$\Delta\lambda$	$I_F = 20\text{mA}$	–	24	–	nm
NTE3070, NTE3071			–	40	–	nm
Forward Voltage, Any Segment or D.P. NTE3068, NTE3069	$V_F$	$I_F = 20\text{mA}$	–	1.7	2.0	V
NTE3070, NTE3071			–	2.1	2.8	V
Reverse Current, Any Segment or D.P.	$I_R$	$V_R = 5\text{V}$	–	–	100	$\mu\text{A}$
Luminous Intensity Matching Ratio	$I_{V-m}$	$I_F = 20\text{mA}$	–	–	2:1	

**Pin Connection Diagram**

**NTE3068, NTE3070**



**NTE3069, NTE3071**

