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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 device utilizes 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:
  - Super Red NTE3068
  - Orange - NTE3070,
  - Amber - 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)

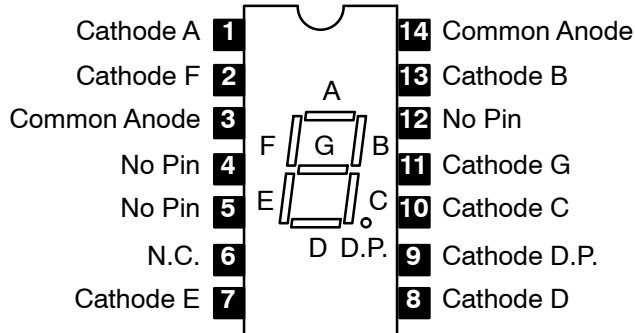
Power Dissipation (Per Segment), $P_T$	
NTE3068, NTE3071	100mW
NTE3070,	75mW
Peak Forward Current (Per Segment, 1/10 Duty Cycle, 0.1ms Pulse Width), $I_{Fpeak}$	100mA
Continuous Forward Current (Per Segment), $I_F$	
NTE3068	40mA
NTE3070	25mA
NTE3071	35mA
Derate Linearly	
NTE3068, NTE3071 from $50^\circ\text{C}$ (Per Segment)	0.40mA/ $^\circ\text{C}$
NTE3070, from $25^\circ\text{C}$ (Per Segment)	0.30mA/ $^\circ\text{C}$
Reverse Voltage (Per Segment), $V_R$	5V
Operating Temperature Range, $T_{opr}$	
NTE3071	$-40^\circ$ to $+80^\circ\text{C}$
All Other Devices	$-25^\circ$ to $+85^\circ\text{C}$
Storage Temperature Range, $T_{stg}$	
NTE3071	$-40^\circ$ to $+80^\circ\text{C}$
All Other Devices	$-25^\circ$ 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	$I_V$	$I_F = 20\text{mA}$	-	10.5	14	md
NTE3071			6	8	10	
NTE3070		$I_F = 10\text{mA}$	850	2200	-	$\mu\text{cd}$
Peak Emission Wavelength NTE3068	$\lambda_P$	$I_F = 20\text{mA}$	655	660	665	nm
NTE3070			-	630	-	nm
NTE3071			600	605	610	nm
Spectral Line Half-Width NTE3068	$\Delta\lambda$	$I_F = 20\text{mA}$	19	24	29	nm
NTE3070			-	40	-	nm
NTE3071			35	40	45	nm
Forward Voltage, Any Segment or D.P. NTE3068	$V_F$	$I_F = 20\text{mA}$	1.6	1.85	2.4	V
NTE3070			-	2.1	2.8	V
NTE3071			1.7	2.1	2.5	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**



**NTE3071**

