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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. The NTE3069 device utilizes LED chips which are made from AlGaAs. The NTE3070 device utilizes LED chips which are made from GaAsP. The NTE3071 device utilizes LED chips which are made from AlGaInP.

Features:

- Choice of Two Bright Colors and Polarity:

Color	Common Anode (+)	Common Cathode (-)
Super Red	NTE3068	NTE3069
Orange/Amber	NTE3070	NTE3071

- 0.4 Inch (10.16mm) Digit Height
- Continuous Uniform Segments
- Low Power Requirement
- Excellent Characters Appearance
- Categorized for Luminous Intensity
- IC Compatible
- Easy Mounting on PC Board or Socket

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

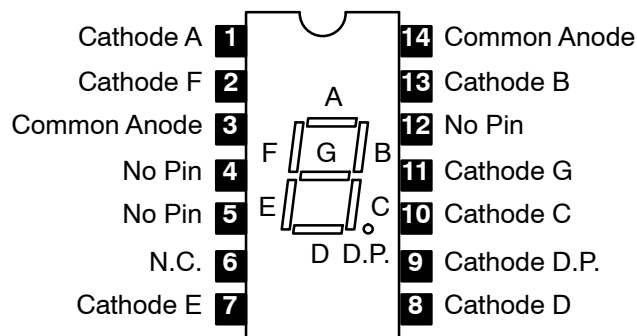
Power Dissipation (Per Segment), P_T	100mW
Peak Forward Current (Per Segment, 1/10 Duty Cycle, 0.1ms Pulse Width), I_{fpeak}	
NTE3068, NTE3069, NTE3070	100mA
NTE3071	150mA
Continuous Forward Current (Per Segment), I_F	
NTE3068, NTE3069	40mA
NTE3070	25mA
NTE3071	30mA
Derate Linearly	
NTE3068, NTE3069, NTE3071 from 50°C (Per Segment)	$0.40\text{mA}/^\circ\text{C}$
NTE3070, from 25°C (Per Segment)	$0.30\text{mA}/^\circ\text{C}$
Reverse Voltage (Per Segment), V_R	5V
Operating Temperature Range, T_{opr}	
NTE3068, NTE3070	-25° to $+85^\circ\text{C}$
NTE3069	-40° to $+80^\circ\text{C}$
NTE3071	-40° to $+85^\circ\text{C}$
Storage Temperature Range, T_{stg}	
NTE3068, NTE3070	-25° to $+85^\circ\text{C}$
NTE3069	-40° to $+80^\circ\text{C}$
NTE3071	-40° to $+85^\circ\text{C}$
Lead Temperature (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	$I_F = 20\text{mA}$	-	10.5	14	md
NTE3071		$I_F = 10\text{mA}$	24	-	60	
NTE3070			850	2200	-	μcd
Peak Emission Wavelength NTE3068, NTE3069	λ_P	$I_F = 20\text{mA}$	655	660	665	nm
NTE3070			-	630	-	nm
NTE3071		$I_F = 10\text{mA}$	-	610	-	nm
Spectral Line Half-Width NTE3068, NTE3069	$\Delta\lambda$	$I_F = 20\text{mA}$	19	24	29	nm
NTE3070			-	40	-	nm
NTE3071		$I_F = 10\text{mA}$	-	20	-	nm
Forward Voltage, Any Segment or D.P. NTE3068, NTE3069	V_F	$I_F = 20\text{mA}$	1.6	1.85	2.4	V
NTE3070			-	2.1	2.8	V
NTE3071		$I_F = 10\text{mA}$	-	2.0	2.5	V
Reverse Current, Any Segment or D.P.	I_R	$V_R = 5\text{V}$	-	-	100	μA
Luminous Intensity Matching Ratio NTE3068, NTE3069, NTE3070	I_{V-m}	$I_F = 20\text{mA}$	-	-	2:1	
NTE3071			-	-	1.5:1	

Pin Connection Diagram

NTE3068, NTE3070



NTE3069, NTE3071

