

NTE3051 0.27" Polarity and Overflow Numeric Display, Common Anode

Description:

The NTE3051 display is mounted on a lead-frame assembly which is then cast within a clear, electrically non-conductive, transparent plastic compound.

Features:

- 0.27" High Characters
- High Brightness
- Low Power Requirements
- Single-Plane Wide-Angle Visibility
- Compatible with Most TTL and DTL Circuits

Absolute Maximum Ratings: (Over Ambient Temperature Range unless otherwise specified)

Reverse Voltage ($T_A = +25^\circ\text{C}$), V_R
 Each Segment 6V
 Decimal Point 3V
 Peak Forward Current, each Segment or Decimal Point (Note 1), I_{FP} 200mA
 Continuous Forward Current, I_F
 Each Segment or Decimal Point 30mA
 Total Device 150mA
 Operating Ambient Temperature Range, T_A 0° to $+70^\circ\text{C}$
 Storage Temperature Range, T_{stg} -55° to $+100^\circ\text{C}$

Note 1. This value applies for $PRR \geq 60\text{Hz}$, Duty Cycle $\leq 10\%$.

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Luminous Intensity Each Segment	I_V	$I_F = 20\text{mA}$, Note 2	100	275	–	μcd
Decimal Point			40	110	–	μcd
Wavelength at Peak Emission Each Segment	λ_P	$I_F = 20\text{mA}$	640	660	680	nm
Decimal Point			645	665	685	nm
Spectral Bandwidth between Half Points	B	$I_F = 20\text{mA}$	–	20	–	nm

Note 2. Luminous intensity is measured with a solar cell and filter combination which approximates the CIE (International Commission on Illumination) eye-response curve.

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Average Temperature Coefficient of Static Forward Voltage Each Segment		$I_F = 20\text{mA}$, $T_A = 0^\circ$ to $+70^\circ\text{C}$	-	-2.7	-	$\text{mV}/^\circ\text{C}$
Decimal Point			-	1.4	-	$\text{mV}/^\circ\text{C}$
Static Reverse Current	I_R	$V_R = 3\text{V}$	-	-	100	μA
Anode-to-Cathode Capacitance Each Segment	C	$V_R = 0$, $f = 1\text{MHz}$	-	85	-	pF
Decimal Point			-	120	-	pF

Pin Connection Diagram

