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NTE3180, NTE3181, NTE3182 Rectangle Light Emitting Diode – 12.7mm x 6.35mm

Description:

The NTE3180 (Super Bright Red), NTE3181 (Green) and NTE3182 (Yellow) are rectangular light sources designed for a variety of applications where a large bright source of light is required. These light bars are configured in dual-in-line packages. The NTE3181 utilize LED chips which are made from GaP on a transparent GaP substrate. The NTE3180 & NTE3182 utilize LED chips which are made from GaAsP on transparent GaP substrate.

Features:

- Low Power Requirement
- I.C Compatible
- Excellent On-Off Contrast
- Panel and Legend Mount Ready
- Suitable for Multiplex Operation
- Easy Mounting On P.C Board

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Power Dissipation Per Chip

NTE3180, NTE3181	100mW
Derate Linear from +50°C	0.4mA/°C
NTE3182	60mW
Derate Linear from +25°C	0.24mA/°C

Peak Forward Current Per Chip (1/10 Duty Cycle, 0.1ms Pulse Width)

NTE3180 & NTE3181	100mA
NTE3182	80mA

Continuous Forward Current Per Chip

NTE3180	40mA
NTE3181	50mA
NTE3182	20mA

Reverse Voltage Per Chip

.....	5V
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Storage and Operating Temperature Range

.....	-25° to +85°C
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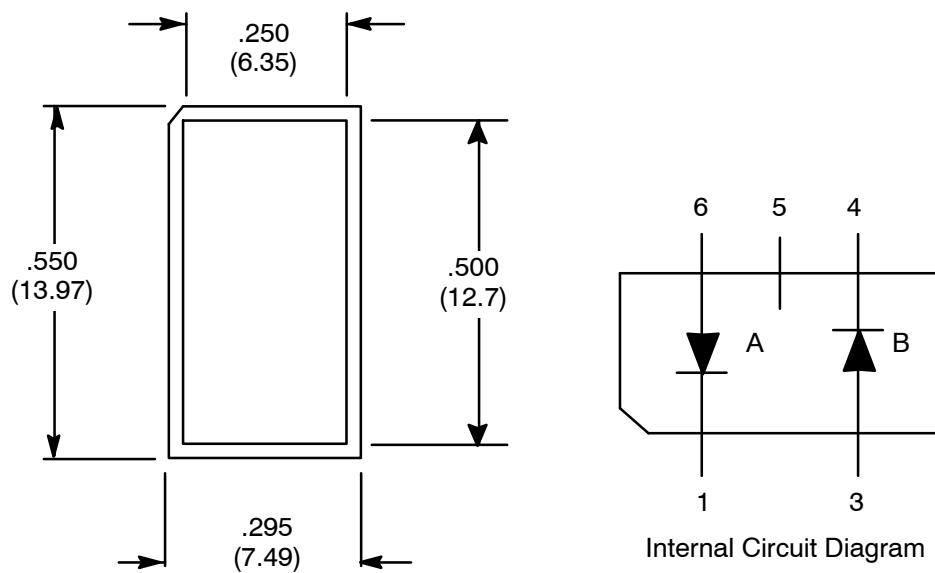
NTE3180 (only)	-40° to +80°C
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Soldering Temperature (1/16 inch Below Seating for 3 Seconds)

.....	+260°C
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Electro-Optical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Viewing Angle NTE3180 Only	$2_{1/2}$		-	100	-	deg.
			-	150	-	deg.
Average Luminous Intensity Per Bar NTE3180 Only	I_V	$I_F = 10\text{mA}$	2.3	4.2	-	mcd
			7	11	15	mcd
Peak Emission Wavelength NTE3180 Only	peak	$I_F = 20\text{mA}$	-	565	-	nm
			563	568	573	nm
Spectral Line Half Width NTE3180 Only	°	$I_F = 20\text{mA}$	-	30	-	nm
			5	10	15	nm
Forward Voltage NTE3180 Only	V_F	$I_F = 20\text{mA}$	-	2.1	2.8	V
			1.7	2.2	2.6	V
Reverse Current	I_R	$V_R = 5\text{V}$	-	-	100	A



Internal Circuit Diagram

