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NTE30105 LED – Dual Color T-1 3/4 (5mm) Red–Yellow Green

Features:

- RoHS Compliant
- White Diffused
- Common Cathode Pin Configuration

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

Forward Current, I_F	20mA
Peak Forward Current (Note 1), I_{FP}	100mA
Power Dissipation, P_d	100mW
Derating Linear from $+30^\circ\text{C}$	$0.8\text{mA}/^\circ\text{C}$
Reverse Voltage, V_R	5V
Operating Temperature Range, T_{opr}	-20°C to $+80^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40°C to $+80^\circ\text{C}$
Lead Temperature (During Soldering, 1.6mm from body, 5sec max), T_L	$+260^\circ\text{C}$

Note 1. I_{FP} Conditions: Pulse Width $\leq 100\mu\text{s}$, Duty Cycle $\leq 1\%$.

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Beam Angle	$2\theta_{1/2}$	$I_F = 20\text{mA}$	–	40	–	deg
Forward Voltage Red	V_F	$I_F = 20\text{mA}$	1.8	2.0	2.2	V
Yellow–Green			2.0	–	2.2	V
Luminous Intensity Red	I_V	$I_F = 20\text{mA}$	200	–	300	mcd
Yellow–Green			40	–	60	mcd
Peak Emission Wavelength Red	λ_p		620	625	630	nm
Yellow–Green			565	570	575	nm

Note 1. I_{FP} Conditions: Pulse Width $\leq 100\mu\text{s}$, Duty Cycle $\leq 1\%$.

Rev. 4–20



Instructions, Lead Forming:

1. During lead formation, the leads should be bent at a point at least 3mm away from the base of the epoxy bulb.
2. Lead forming should be done before soldering.
3. Avoid stressing the LED package during lead forming. The stress to the base may damage the LED's characteristics or it may break the LEDs.
4. Cut the LED leadframes at room temperature. Cutting the leadframes at high temperatures may cause failure of the LEDs.
5. When mounting the LEDs onto a PCB, the PCB holes must be aligned exactly with the lead position of the LED. If the LEDs are mounted with stress at the leads, it causes deterioration of the epoxy resin and this will degrade the LEDs.

