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## NTE30047 Infrared Emitting Diode – 5mm (T-1<sup>3/4</sup>)

**Features:**

- Low Power Consumption
- High Efficiency
- High Intensity
- Lens Type: Water Clear

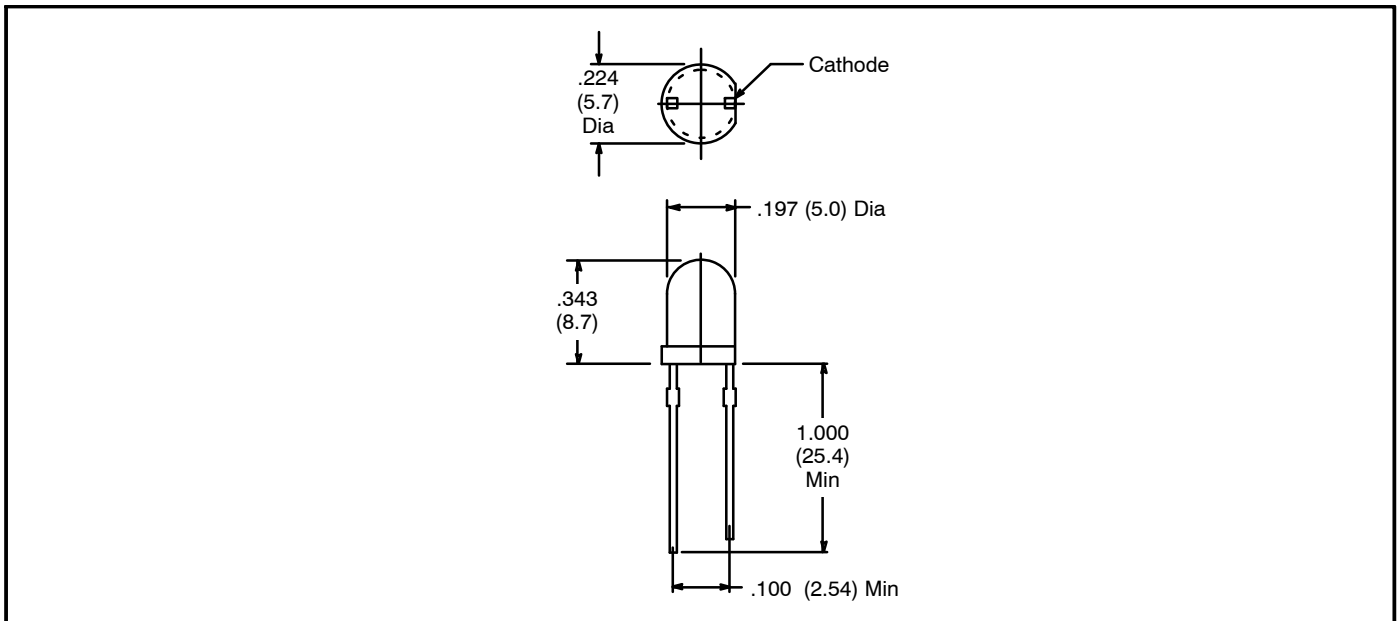
**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Power Dissipation, $P_D$ .....	100mW
Forward Current (Note 1), $I_{FM}$ .....	800mA
Reverse Voltage ( $I_R = 10\mu\text{A}$ ), $V_R$ .....	9V
Operating Temperature Range, $T_{opr}$ .....	$-30^\circ$ to $+80^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-40^\circ$ to $+100^\circ\text{C}$
Lead Temperature (During Soldering, .157" (4mm) from case bottom, 5sec max), $T_L$ .....	$+260^\circ\text{C}$

Note 1. Duty = 0.01ms, 1kHz

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Viewing Angle	$2\theta_{1/2}$	$I_F = 20\text{mA}$	-	40	-	degree
Forward Voltage	$V_F$	$I_F = 50\text{mA}$	-	1.3	1.6	V
Reverse Current	$I_R$	$V_R = 5\text{V}$	-	-	10	$\mu\text{A}$
Radiant Intensity	$E_e$	$I_F = 20\text{mA}$	7	10	-	$\text{mw/sr}$
		$I_F = 300\text{mA}$	95	140	-	$\text{mw/sr}$
Peak Emission Wavelength	$\lambda_p$	$I_F = 20\text{mA}$	-	940	-	nm
Spectrum Line Half-Width	$\Delta\lambda$	$I_F = 20\text{mA}$	45	50	55	nm



Rev. 3-20

