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## NTE30048 Infrared Emitting Diode – 5mm (T-1<sup>3/4</sup>)

**Features:**

- High Radiant Intensity
- High Reliability
- Low Forward Voltage
- Pb Free
- Lens Color: Water Clear

**Applications:**

- Free Air Transmission System
- Optoelectronic Switch
- Floppy Disk Drive
- Infrared Applied System
- Smoke Detector

**Absolute Maximum Ratings:** (T<sub>A</sub> = +25°C unless otherwise specified)

Power Dissipation (at or below 25°C Free Air Temperature), P <sub>d</sub> .....	150mW
Continuous Forward Current, I <sub>F</sub> .....	50mA
Transient Peak Current (Pulse Width=100µs, Duty Cycle=1%), I <sub>FP</sub> .....	200mA
Reverse Voltage, V <sub>R</sub> .....	5V
Operating Temperature, T <sub>opr</sub> .....	-40° to +85°C
Storage Temperature, T <sub>stg</sub> .....	-40° to +85°C
Soldering Temperature (4mm from mold body less than 5 seconds), T <sub>sol</sub> .....	+260°C

**Electrical Characteristics:**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Viewing Angle	θ	I <sub>F</sub> = 50mA	-	30	-	degree
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 50mA	1.30	1.40	-	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5.0V	-	-	10	uA
Radiation Intensity	I <sub>e</sub>	I <sub>F</sub> = 50mA	45	52	-	mW/sr
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> = 50mA	-	850	-	nm
Spectral Bandwidth	Δλ	I <sub>F</sub> = 50mA	-	50	-	nm

