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NTE30047 Infrared Emitting Diode – 5mm

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

Power Dissipation, P_D	150mW
Forward Current, I_F	
Continuous	150mA
Peak (Note 1)	2A
Reverse Voltage, V_R	5V
LED Junction Temperature, T_J	+100°C
Operating Temperature Range, T_{opr}	-25° to +85°C
Storage Temperature Range, T_{stg}	-40° to +100°C
Lead Temperature (During Soldering, .062 (1.6mm) from case bottom, 5sec max), T_L	+260°C

Note 1. Duty Ratio = 0.1%, Pulse Width = 10µs

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Viewing Angle of Half Power	$2\theta_{1/2}$	$I_F = 50\text{mA}$	-	40	-	degree
Forward Voltage	V_F	$I_F = 50\text{ mA}$	-	1.25	1.45	V
Reverse Current	I_R	$V_R = 5\text{V}$	-	-	10	uA
Radiant Output Power	P_O	$I_F = 50\text{ mA}$ (Note 2)	30	50	-	mw/sr
Peak Emission Wavelength	λ_p	$I_F = 50\text{ mA}$	-	940	-	nm
Spectrum Width of Half Valve	$\Delta\lambda$	$I_F = 50\text{ mA}$	-	50	-	nm
Terminal Capacitance	C_t	$V = 0, F = 1\text{MHz}$	-	40	-	pF

Note 2. Tolerance: 30%, measured using Exeltron 2001.

