



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

NTE30107
NTE30107-CA
LED – Dual Color
5mm Super Bright Red/Super Bright Blue

Features:

- RoHS Compliant
- Dice material: AlGaInP; InGaN
- Lens Type: Water Clear
- Low Power Consumption
- High Efficiency
- High Intensity
- Common Cathode (NTE30107) and Common Anode (NTE30107-CA) Pin Configurations

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

Power Dissipation, P_d		
Super Bright Red	75mW	
Super Bright Blue	120mW	
Peak Forward Current (1/10 Duty Ratio, 0.1ms Pulse Width), I_{FM}		
Super Bright Red	150mA	
Super Bright Blue	100mA	
Continuous Forward Current, I_F	30mA	
Derate Linear from $+50^\circ\text{C}$	0.4mA/ $^\circ\text{C}$	
Reverse Voltage, V_R	5V	
Operating Temperature Range, T_{opr}	-40°C to $+85^\circ\text{C}$	
Storage Temperature Range, T_{stg}	-40°C to $+100^\circ\text{C}$	
DIP Soldering Temperature (During Soldering, 4mm from body, 5sec max), T_L	$+260^\circ\text{C}$	

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

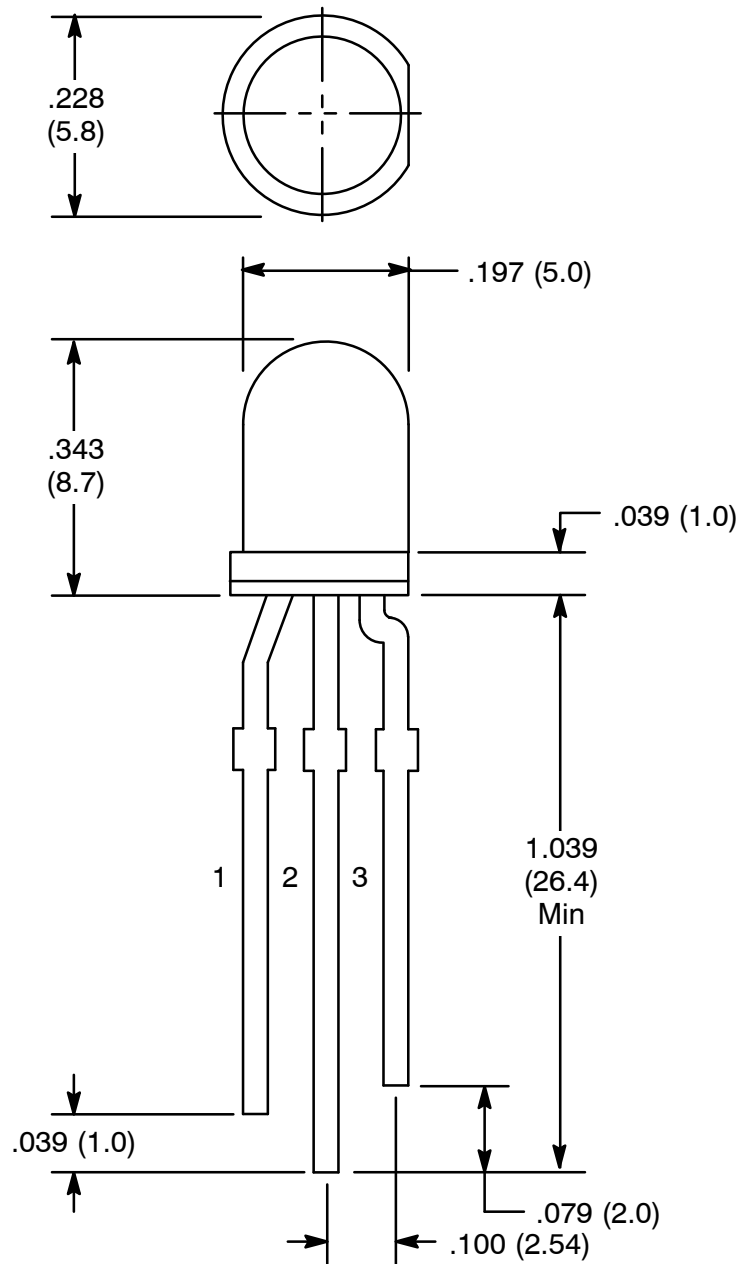
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
View Angle	2θ 1/2	$I_F = 20\text{mA}$	–	30	–	deg
Forward Voltage	V_F	$I_F = 20\text{mA}$	1.8	2.1	2.5	V
Super Bright Red						
Super Bright Blue			2.6	3.1	3.6	V
Reverse Current	I_R	$V_R = 5\text{V}$	–	–	10	μA
Luminous Intensity	I_v	$I_F = 20\text{mA}$	–	1380	–	mcd
Super Bright Red						
NTE30107						
NTE30107-CA			–	5000	–	mcd
Super Bright Blue			–	3000	–	mcd

Rev. 7-20



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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Peak Emission Wavelength Super Fresh Red	λ_p	$I_F = 20\text{mA}$	-	630	-	nm
Super Blue			-	470	-	nm
Dominant Wave Length Super Fresh Red	$\lambda_d(\text{HUE})$	$I_F = 20\text{mA}$	618	625	630	nm
Super Blue			465	470	475	nm
Spectral Line Half-Width Super Fresh Red	$\Delta\lambda$	$I_F = 20\text{mA}$	-	20	-	nm
Super Blue			-	30	-	nm



- 1. Red
- 2. Common Lead (- Cathode, + Anode)
- 3. Blue