ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089
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NTE30065 thru NTE30071
Super Bright LED Indicators
10mm (T–3 1/4) Water Clear Lens

Features:

- RoHS Compliant
- All Plastic Mold Type w/Water Clear Lens:
  - NTE30065 (Yellow Green, AlInGaP/GaAs)
  - NTE30066 (Light Green, InGaN/GaN)
  - NTE30067 (Orange, AlInGaP/GaAs)
  - NTE30068 (Light Red, AlInGaP/GaAs)
  - NTE30069 (Deep Red, GaAlAs/GaAlAs)
  - NTE30070 (Blue)
  - NTE30071 (Super White, GaInN/GaN)

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Reverse Voltage, V_R
- All Device 5V
- NTE30066 **Only** 4V

Continuous Forward Current, I_F
- All Devices 25mA
- NTE30066 **Only** 30mA

Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width), I_{FM}
- NTE30065, NTE30067, NTE30068, NTE30069 . . . . . 50mA
- NTE30066, NTE30070, NTE30071 . . . . . 100mA

Electrostatic Discharge (HBM, NTE30071 **Only**), ESD 150V

Power Dissipation, P_D
- NTE30065, NTE30067, NTE30068, NTE30070 . . . . . 100mW
- NTE30069 . . . . . 110mW
- NTE30066 . . . . . 120mW
- NTE30071 . . . . . 80mW

LED Junction Temperature, T_j . . . . . +100°C

Operating Temperature Range, T_{opr}
- All Devices . . . . . –25°C to +85°C
- NTE30070, NTE30071 **Only** . . . . . –20°C to +80°C

Storage Temperature Range, T_{stg}
- NTE30067 **Only** . . . . . –25°C to +100°C
- NTE30070, NTE30071 **Only** . . . . . –30°C to +100°C
- All Other Devices . . . . . –40°C to +100°C

Lead Temperature (During Soldering, .063 (1.6mm) from body, 5sec max), T_L . . . . . +260°C

Electro–Optical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage NTE30065	V_F	I_F = 20mA	–	2.2	2.5	V
NTE30066			–	3.5	4.0	V
NTE30067, NTE30068			–	2.0	2.5	V
NTE30069			–	1.86	2.5	V

Rev. 04–24

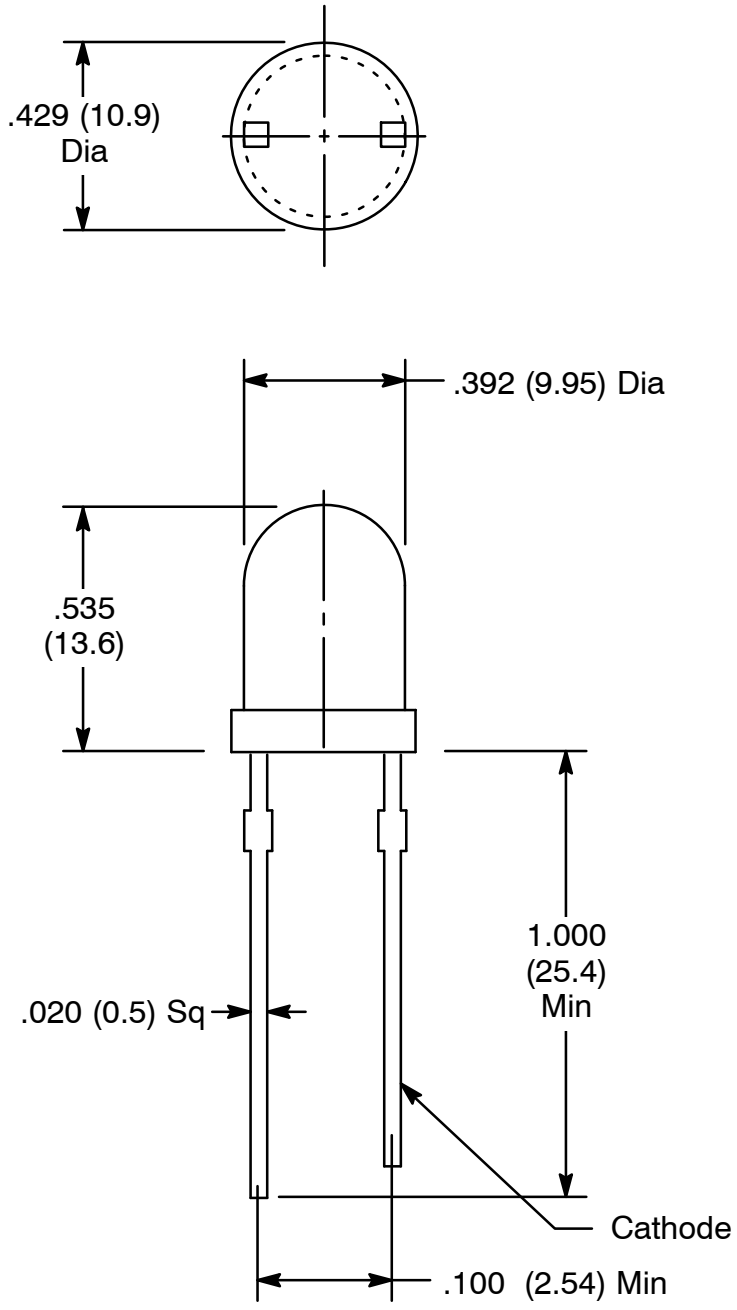
RoHS

Electro−Optical Characteristics (Cont'd): (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage (Cont'd)						
NTE30070	V_F	I_F = 20mA	3.0	–	3.4	V
NTE30071			3.0	3.3	3.6	V
Reverse Current						
All Devices	I_R	V_R = 5V	–	–	10	μA
NTE30070			–	–	1.0	μA
NTE30066		V_R = 4V	–	–	60	μA
Luminous Intensity						
NTE30065	I_V	I_F = 20mA, Note 1	600	1300	–	mcd
NTE30066			1800	3500	–	mcd
NTE30067			1200	2000	–	mcd
NTE30068			1400	2000	–	mcd
NTE30069			1500	3000	–	mcd
NTE30070			3000	–	4000	mcd
NTE30071			10000	–	12000	mcd
Peak Emission Wave Length						
NTE30065	λ_P	I_F = 20mA	–	575	–	nm
NTE30066			–	523	–	nm
NTE30067			–	592	–	nm
NTE30068			–	620	–	nm
NTE30069			–	660	–	nm
NTE30070			460	465	470	nm
NTE30071		CIE Coordinates, Typ	X: 0.30; Y: 0.30			
Dominate Wave Length						
NTE30065	λ_d (HUE)	I_F = 20mA, Note 2	–	572	–	nm
NTE30066			520	525	540	nm
NTE30067			–	590	–	nm
NTE30068			–	615	–	nm
NTE30069			–	645	–	nm
Correlative Color Temp (NTE30071 **Only**)	T_c	I_F = 20mA	7000	–	9000	K
Spectral Line Half Width						
NTE30065	$\Delta\lambda$	I_F = 20mA	–	15	–	nm
NTE30066			–	45	–	nm
NTE30067, NTE30068			–	25	–	nm
NTE30069			–	20	–	nm
Viewing Angle						
All Devices	$2\theta^1/_2$	I_F = 20mA	–	40	–	deg.
NTE30070, NTE30071			–	30	–	deg.
Terminal Capacitance						
NTE30065	C_t	V = 0V, f = 1MHz	–	35	–	pF
NTE30067			–	14	–	pF
NTE30068			–	20	–	pF
NTE30069			–	22	–	pF
Response Frequency						
NTE30065, NTE30067, NTE30068, NTE30069	F_c		–	4	–	MHz
Optic Rise Time (NTE30066 **Only**)	τ	I_F = 20mA	–	30	–	ns

Note 1. Luminous intensity is measured with an Exeltron 2001.

Note 2. The dominate wavelength, λ_d, is derived from the CIE Chromaticity Diagram and represents the color of the device.


.429 (10.9)
Dia
.392 (9.95) Dia
.535
(13.6)
1.000
(25.4)
Min
.020 (0.5) Sq
Cathode
.100 (2.54) Min