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This device has been replaced by NTE30128

## NTE30122 LED Indicator Ultraviolet, 5mm

### **Features:**

- High Intensity
- Normal T-1 3/4 (5mm) Diameter Package
- General Purpose Leads
- Reliable and Rugged

### **Applications:**

- Identifies Counterfeit U.S. Currency
- Identification of UV Watermark on Credit Cards, Drivers Licenses, Passports, etc.
- UV Illumination of Detailed Seals, Stamps, Stickers, Images, and Multicolored Fibers on Visas, Passports and Currencies of Various Nations

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

Power Dissipation,  $P_D$  ..... 120mW  
Peak Forward Current (1/10th Duty Cycle, 0.1ms Pulse Width),  $I_{FM}$  ..... 150mA  
Continuous Forward Current,  $I_F$  ..... 35mA  
Derate Linearly From  $+50^\circ\text{C}$  ..... 0.4mA/ $^\circ\text{C}$   
Reverse Voltage,  $V_R$  ..... 5V  
Operating Temperature Range,  $T_{opr}$  .....  $-40^\circ$  to  $+80^\circ\text{C}$   
Storage Temperature Range,  $T_{stg}$  .....  $-40^\circ$  to  $+80^\circ\text{C}$   
Lead Temperature (During Soldering, 4mm from Body, 5sec Max),  $T_L$  .....  $+260^\circ\text{C}$

**CAUTION:** UV light can be harmful to the eyes even for a brief period. If it is necessary to view UV light, filtered glasses must be used. Affix a caution label if the UV light in your product can be viewed directly.

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Luminous Intensity	$I_V$	$I_F = 20\text{mA}$ , Note 1	60	–	90	mcd
View Angle of Half Power	$2 \theta_{1/2}$	Note 2	10	15	20	deg
Peak Emission Wavelength	$\lambda_P$	$I_F = 20\text{mA}$	–	–	–	nm
Dominant Emission Wavelength	$\lambda_d$	$I_F = 20\text{mA}$ , Note 3	380	–	385	nm
Spectral Line Half-Width	$\Delta\lambda$	$I_F = 20\text{mA}$	–	25	–	nm
Forward Voltage	$V_F$	$I_F = 20\text{mA}$	3.0	3.3	3.7	V
Reverse Current	$I_R$	$V_R = 5\text{V}$	–	–	10	$\mu\text{A}$

Note 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

Note 2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

Note 3. The dominant wavelength ( $\lambda_d$ ) is derived from the CIE chromaticity diagram and represents the single wavelength, which defines the color of the device.

