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This device has been replaced by NTE30128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° to $+80^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° 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	λ_P	$I_F = 20\text{mA}$	–	–	–	nm
Dominant Emission Wavelength	λ_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	μA

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 (λ_d) is derived from the CIE chromaticity diagram and represents the single wavelength, which defines the color of the device.

