



ELECTRONICS, INC.
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NTE30140–EW thru NTE30145–EW Discrete LED Indicators with 1/8W Resistor 3mm (T–1) Package Type

Features:

- All 3mm Types w/Water Clear Lens:

NTE30140–EW (Red)	NTE30143–EW (White)
NTE30141–EW (Green)	NTE30144–EW (Pink)
NTE30142–EW (Blue)	NTE30145–EW (Purple)
- Includes EW122 Metal Film Resistor (1/8 Watt, 220Ω, 2% Tolerance)

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

Power Dissipation, P_D	80mW
Peak Forward Current (1/10th Duty Cycle, 0.1ms Pulse Width), I_{FM}	100mA
Continuous Forward Current, I_F	25mA
Derating Linear from $+30^{\circ}\text{C}$	0.8mA/ $^{\circ}\text{C}$
Reverse Voltage, V_R	5V
Operating Temperature Range, T_{opr}	-20° to $+80^{\circ}\text{C}$
Storage Temperature Range, T_{stg}	-30° to $+100^{\circ}\text{C}$
Lead Temperature (During Soldering, 1.6mm from Body, 5sec Max), T_L	$+260^{\circ}\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage NTE30140–EW	V_F	$I_F = 20\text{mA}$	2.0	–	2.2	V
All Others			3.0	–	3.2	V
Luminous Intensity NTE30140–EW	I_V	$I_F = 20\text{mA}$	500	–	800	mcd
NTE30141–EW			5000	–	7000	mcd
NTE30142–EW			1000	–	1500	mcd
NTE30143–EW			4000	–	6000	mcd
NTE30144–EW			300	–	400	mcd
NTE30145–EW			100	–	150	mcd
Peak Emission Wavelength NTE30140–EW	λ_P		620	–	630	nm
NTE30141–EW			515	–	525	nm
NTE30142–EW			460	–	470	nm
NTE30143–EW			8000	–	12000	K
NTE30145–EW			390	–	410	nm
Half Intensity Angle	$2 \theta_{1/2}$		–	30	–	deg



Electrical Characteristics: (@ +70°C)

NTE Number	Resistance Range (Ohms)	Tolerance (%)	Voltage (Volts)	Operating Temperature (T _{opr})	Temperature Coefficient (PPM/°C)
EW122	220	2	150	-55° to +155°C	200

