



ELECTRONICS, INC.
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NTE3166, NTE3167, NTE3168 Light Emitting Diode – 2mm x 5mm

Features:

- Lead Frame Type ^{w/}Diffused Lens:
 NTE3166 (Red, GaP/GaP)
 NTE3167 (Green, GaP/GaP)
 NTE3168 (Yellow, GaAsP/GaP)

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

Power Dissipation, P_D		
NTE3166	75mW	
NTE3167, NTE3168	70mW	
Continuous Forward Current, I_F		
NTE3166	30mA	
NTE3167, NTE3168	25mA	
Reverse Voltage, V_R		
NTE3166	5V	
NTE3167, NTE3168	3V	
Operating Temperature Range, T_{opr}		
NTE3166	-20° to $+80^\circ\text{C}$	
NTE3167, NTE3168	-25° to $+80^\circ\text{C}$	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
View Angle of Half Power						
NTE3166	$2\theta_{1/2}$	$I_F = 20\text{mA}$	–	130	–	Degree
NTE3167, NTE3168			–	50	–	Degree
Peak Wave Length						
NTE3166	λ_{peak}		–	700	–	nm
NTE3167			–	565	–	nm
NTE3168			–	585	–	nm
Dominant Wavelength (NTE3166 ONLY)	λ_d		–	660	–	nm
Spectral Line Half-Width (NTE3166 ONLY)	$\Delta\lambda$		–	100	–	nm
Forward Voltage	V_F		–	2.1	–	V
Forward Current						
NTE3166	I_F		–	30	–	mA
NTE3167, NTE3168			–	20	–	mA
Luminous Intensity						
NTE3166	L		–	4.0	–	mcd
NTE3167			–	0.8	–	mcd
NTE3168			–	2.0	–	mcd

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Current NTE3166	I_R	$V_R = 5\text{V}$	-	-	10	μA
NTE3167, NTE3168		$V_R = 3\text{V}$	-	-	10	μA

