

Standard LED

Red Emitting Colour



Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Maximum	Unit
Power Dissipation	80	mW
Peak Forward Current (1/10 Duty Cycle, 0.1 ms Pulse Width)	100	mA
Continuous Forward Current	20	
Derating Linear From 50°C	0.4	mA / $^\circ\text{C}$
Reverse Voltage	5	V
Operating Temperature Range	-25°C to $+80^\circ\text{C}$	
Storage Temperature Range	-40°C to $+100^\circ\text{C}$	
Lead Soldering Temperature (4 mm (0.157) Inches from Body)	260 $^\circ\text{C}$ for 5 s	

Electrical Optical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Test Condition
Luminous Intensity	I_v		40		mcd	$I_f = 20\text{ mA}$ (Note 1)
Viewing Angle	$2\theta_{1/2}$		25		Deg	(Note 2)
Peak Emission Wavelength	λ_p		640		nm	$I_f = 20\text{ mA}$
Dominant Wavelength	λ_d		635		nm	$I_f = 20\text{ mA}$ (Note 3)
Spectral Line Half-Width	$\Delta\lambda$		25		nm	$I_f = 20\text{ mA}$
Forward Voltage	V_f		2	2.5	V	$I_f = 20\text{ mA}$
Reverse Current	I_R	-	-	100	μA	$V_R = 5\text{ V}$

Notes:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity
3. The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the colour of the device