

Radiation	Type	Technology	Case
Red	Standard	AllnGaP/GaAs	5 mm plastic lens

	Description Reliable high-speed red LED in standard 5 mm package, with lens for optimal beam focusing, housing without standoff leads
	Applications Optical communications, safety equipment, automation, optical sensors

Maximum Ratings

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I_F	50	mA
Peak forward current	$(t_p \leq 50 \mu\text{s}, t_p/T = 1/2)$	I_{FM}	100	mA
Operating temperature range		T_{amb}	-20 to +85	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-55 to +100	$^{\circ}\text{C}$
Junction temperature		T_J	100	$^{\circ}\text{C}$

Optical and Electrical Characteristics

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	V_F		2.1	2.5	V
Reverse voltage	$I_R = 10 \mu\text{A}$	V_F	5			V
Radiant power	$I_F = 20 \text{ mA}$	Φ_e	2	3		mW
Luminous intensity	$I_F = 20 \text{ mA}$	I_v	1350	1900		mcd
Peak wavelength	$I_F = 20 \text{ mA}$	λ_p	620	630	640	nm
Viewing angle	$I_F = 20 \text{ mA}$	φ		20		deg.
Switching time	$I_F = 20 \text{ mA}$	t_r, t_f		20		ns

*measured after 30s current flow

Note: All measurements carried out on *EPIGAP* equipment