

Radiation	Type	Technology	Case
Infrared	SMD	AlGaAs/AlGaAs	SMD 0805

<p>All dimensions in mm Tolerances: ±0,1mm</p>	<p>Description</p> <p>High-power, high speed LED in standard SMD package, compact design allows for easy circuit board mounting or assembling of arrays</p>
	<p>Applications</p> <p>Optical communications, remote control and light barriers, measurement applications and security systems, automation</p>

Absolute Maximum Ratings

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

Parameter	Test conditions	Symbol	Value	Unit
DC forward current		I_F	50	mA
Peak forward current	$t_p \leq 10 \mu\text{s}$, $t_p/T \leq 0.1$	I_{FM}	100	mA
Power dissipation		P	100	mW
Operating temperature range		T_{amb}	-40 to +85	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-55 to +100	$^{\circ}\text{C}$

Electrical and Optical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	V_F		1,6	1,9	V
Reverse voltage	$I_F = 100 \mu\text{A}$	V_R	5			V
Radiant power	$I_F = 100 \text{ mA}$	Φ_e	4.6	6.0		mW
Radiant intensity	$I_F = 100 \text{ mA}$	I_e	1.25	1.6		mW/sr
Peak wavelength	$I_F = 100 \text{ mA}$	λ_p	860	875	890	nm
Spectral bandwidth at 50%	$I_F = 100 \text{ mA}$	$\Delta\lambda_{0,5}$		30		nm
Viewing angle	$I_F = 100 \text{ mA}$	φ		120		deg.
Switching time	$I_F = 100 \text{ mA}$	t_r, t_f		20		ns

Note: All measurements carried out with *EPIGAP* equipment