

Radiation	Type	Technology	Case
Infrared	DH	AlGaAs/GaAs	5 mm plastic lens

	Description High-power NIR-LED, housing without standoff leads Note: Special packages with standoff available on request
	Applications Remote control, safety equipment, automation

Maximum Ratings

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

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I_F	100	mA
Peak forward current	$(t_p \leq 50 \mu\text{s}, t_p/T = 1/2)$	I_{FM}	200	mA
Reverse voltage	$I_R = 10 \mu\text{A}$	V_R	5	V
Power dissipation		P_D	280	mW
Operating temperature range		T_{amb}	-20 to +100	$^{\circ}\text{C}$
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	$I_F = 100 \text{ mA}$	V_F		1,4	1,6	V
Radiant power	$I_F = 100 \text{ mA}$	Φ_e	20	30		mW
Radiant intensity	$I_F = 100 \text{ mA}$	I_e	50	70		mW/sr
Peak wavelength	$I_F = 100 \text{ mA}$	λ_p	920	935	950	nm
Spectral bandwidth at 50%	$I_F = 100 \text{ mA}$	$\Delta\lambda_{0.5}$		50		nm
Viewing angle	$I_F = 100 \text{ mA}$	φ		25		deg.
Switching time	$I_F = 100 \text{ mA}$	t_r, t_f		600		ns

Note: All measurements carried out on *EPIGAP* equipment