

Radiation	Type	Technology	Case
Infrared	DDH	AlGaAs/AlGaAs	3 mm plastic lens

	Description High-power, high-speed infrared LED in standard 3 mm package, housing with standoff leads Note: Special packages without standoff available on request
	Applications Optical communications, 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	($t_p \leq 10 \mu\text{s}$, $T = 10 \text{ ms}$)	I_{FM}	500	mA
Power dissipation		P_D	120	mW
Operating temperature range		T_{amb}	-20 to +85	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-30 to +100	$^{\circ}\text{C}$
Soldering temperature	$t \leq 5 \text{ s}$, 3 mm from case	T_{sd}	260	$^{\circ}\text{C}$

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		1.3	1.5	V
Forward voltage*	$I_F = 100 \text{ mA}$	V_F		1.5		V
Reverse voltage	$I_R = 100 \mu\text{A}$	V_R	5			V
Radiant power	$I_F = 20 \text{ mA}$	Φ_e	6	11		mW
Radiant power*	$I_F = 100 \text{ mA}$	Φ_e		50		mW
Radiant intensity	$I_F = 20 \text{ mA}$	I_e		12		mW/sr
Radiant intensity*	$I_F = 100 \text{ mA}$	I_e		55		mW/sr
Peak wavelength	$I_F = 50 \text{ mA}$	λ_p	860	875	890	nm
Spectral bandwidth at 50%	$I_F = 50 \text{ mA}$	$\Delta\lambda_{0.5}$		40		nm
Viewing angle	$I_F = 20 \text{ mA}$	φ		45		deg.
Switching time	$I_F = 20 \text{ mA}$	t_r, t_f		30/20		ns

*for information only

Note: All measurements carried out on *EPIGAP* equipment

We reserve the right to make changes to improve technical design and may do so without further notice.

Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.

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