

Radiation	Type	Technology	Case
Infrared	DDH	AlGaAs/AlGaAs	5 mm plastic lens

	Description
	<p>Description</p> <p>High-power, high-speed LED with narrow beam angle and high reliability, housing with standoff leads</p> <p>Note: Special packages without standoff available on request</p>
	<p>Applications</p> <p>Optical communications, safety equipment, automation</p>

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
Power dissipation		P_D	120	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	$^{\circ}\text{C}$
Lead soldering temperature	< 5s, 3.0 mm from case	T_{sol}	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		1.7	2.0	V
Forward voltage ¹	$I_F = 50 \text{ mA}$	V_F		2,0		V
Reverse voltage	$I_R = 100 \mu\text{A}$	V_R	5			V
Radiant power	$I_F = 20 \text{ mA}$	Φ_e	4	6		mW
Radiant power ¹	$I_F = 50 \text{ mA}$	Φ_e		14		mW
Radiant intensity	$I_F = 20 \text{ mA}$	I_e	24	30		mW/sr
Radiant intensity ¹	$I_F = 50 \text{ mA}$	I_e		70		mW/sr
Peak wavelength	$I_F = 20 \text{ mA}$	λ_p	760	770	780	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		30		nm
Viewing angle	$I_F = 20 \text{ mA}$	φ		20		deg.
Switching time	$I_F = 20 \text{ mA}$	t_r, t_f		35		ns

¹for 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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