

Radiation	Type	Technology	Case
Infrared	MQW	InGaAs/InP	5 mm plastic lens

	<b>Description</b> High-power, high-speed infrared LED in standard 5 mm package, housing without standoff leads  Note: Special packages with standoff available on request
	<b>Applications</b> 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	$(t_p \leq 50 \mu\text{s}, t_p/T = 1/2)$	$I_{FM}$	200	mA
Power dissipation		$P_D$	150	mW
Operating temperature range		$T_{amb}$	-20 to +80	$^{\circ}\text{C}$
Storage temperature range		$T_{stg}$	-55 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	$I_F = 20 \text{ mA}$	$V_F$		0.75	0.9	V
Forward voltage*	$I_F = 100 \text{ mA}$	$V_F$		0,85		V
Reverse voltage	$I_R = 100 \mu\text{A}$	$V_R$	5			V
Radiant power	$I_F = 20 \text{ mA}$	$\Phi_e$	1,3	1,6		mW
Radiant power*	$I_F = 100 \text{ mA}$	$\Phi_e$		5,5		mW
Peak wavelength	$I_F = 20 \text{ mA}$	$\lambda_p$	1040	1060	1080	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0,5}$		50		nm
Viewing angle	$I_F = 20 \text{ mA}$	$\varphi$		20		deg.
Switching time	$I_F = 20 \text{ mA}$	$t_r, t_f$		10		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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