

Radiation	Type	Technology	Case
Blue	Standard	InGaN/Al ₂ O ₃	5 mm plastic lens

	Description High-power, high-speed blue LED in standard 5 mm package, narrow beam angle, housing without standoff leads Note: Special packages with standoff available on request
	Applications Illumination, safety equipment, automation

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	$t_p \leq 10 \mu\text{s}$, $f \leq 500 \text{ Hz}$	I_{FM}	100	mA
Power dissipation		P	200	mW
Operating temperature range		T_{amb}	-20 to +80	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-30 to +100	$^{\circ}\text{C}$
Junction temperature		T_j	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		3.5	4.0	V
Reverse voltage	$I_R = 10 \mu\text{A}$	V_R	5			V
Luminous intensity	$I_F = 20 \text{ mA}$	I_v	2450	3700		mcd
Peak wavelength	$I_F = 20 \text{ mA}$	λ_p	468	475	480	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		25		nm
Viewing angle	$I_F = 20 \text{ mA}$	φ		15		deg.
Switching time	$I_F = 20 \text{ mA}$	t_r, t_f		40		ns

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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