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Data sheet

Blue LED

EOLD-470-013-2

Rev. 03, 2017

Radiation	Type	Case
Blue	InGaN	TO-46 with lens cap

Description:	
	<p>High power, high-speed, narrow beam angle, high reliability</p>

Maximum Ratings

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

Parameter	Test Conditions	Symbol	Value	Unit
Forward current		I_F	30	mA
Peak forward current	$t_p \leq 100 \mu\text{s}$, $D=0.1$	I_{FM}	300	mA
Reverse voltage	$I_R = 100 \mu\text{A}$	V_R	5	V
Power dissipation		P_D	120	mW
Operating temperature range		T_{amb}	-20 to +85	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-30 to +105	$^{\circ}\text{C}$
Lead soldering temperature	< 5 s, 3 mm from case	T_{slg}	260	$^{\circ}\text{C}$
Junction temperature		T_J	100	$^{\circ}\text{C}$

Optical and Electrical Characteristics

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 20 \text{ mA}$		3.6	4.2	V
Reverse current	I_R	$V_R = 5 \text{ V}$			100	μA
Radiant power	Φ_e	$I_F = 20 \text{ mA}$	2	4		mW
Peak wavelength	λ_p	$I_F = 20 \text{ mA}$		470		nm
FWHM	$\Delta\lambda_{0.5}$	$I_F = 20 \text{ mA}$		35		nm
Viewing angle	φ	$I_F = 20 \text{ mA}$		12		deg.
Temperature coefficient	$TC\Phi_e$	$I_F = 10 \text{ mA}$		-0.2		%/K
Temperature coefficient	TCV_F	$I_F = 10 \text{ mA}$		-3.0		mV/K

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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.