

Radiation	Type	Technology	Case
Infrared	SMD	AlGaAs/AlGaAs	TOPLED

	<p>Description</p> <p>High-power, high speed LED in TOPLED® PLCC-2 package, compact design allows for easy circuit board mounting and assembling of arrays</p>
	<p>Applications</p> <p>Optical communications, remote control, light barriers, measurement applications and security systems, automation</p>

Absolute Maximum Ratings

at T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
DC forward current		I _F	100	mA
Peak forward current	t _p ≤ 50 μs, t _p /T ≤ 0.5	I _{FM}	200	mA
Surge forward current	t _p ≤ 10 μs	I _{SFM}	2000	mA
Power dissipation		P	180	mW
Operating temperature range		T _{amb}	-40 to +85	°C
Storage temperature range		T _{stg}	-40 to +90	°C

Electrical and Optical Characteristics

at T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F = 100 mA	V _F		1.6	1.85	V
Reverse voltage	I _F = 100 μA	V _R	5			V
Radiant power	I _F = 100 mA	Φ _e	25	35		mW
Radiant intensity	I _F = 100 mA	I _e	10	13		mW/sr
Peak wavelength	I _F = 100 mA	λ _p	870	880	900	nm
Spectral bandwidth at 50%	I _F = 100 mA	Δλ _{0.5}		40		nm
Viewing angle	I _F = 100 mA	φ		135		deg.
Switching time	I _F = 100 mA	t _r , t _f		25		ns

Note: All measurements carried out with 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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