

EPIGAP Optronik GmbH

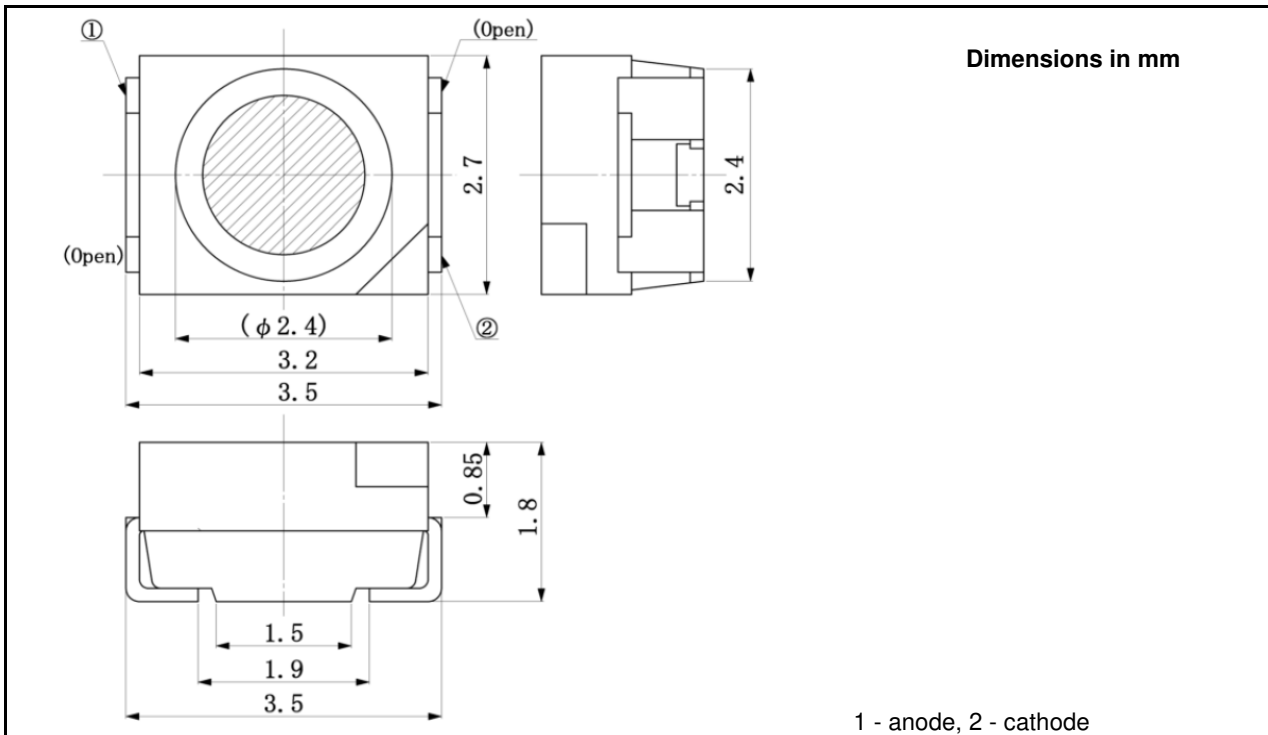
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Infrared SMD LED

EOLS-1650-995

Radiation	Type	Case
Infrared	InGaAs/InP, MQW	SMD 3527 (1411), PLCC4



Absolute Maximum Ratings

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

Parameter	Test Conditions	Symbol	Value	Unit
Peak forward current	$t_p \leq 10 \mu\text{s}$, $T=10 \text{ ms}$	I_{FP}	500	mA
Continuous forward current		I_F	50	mA
Reverse voltage		V_R	5	V
Operating temperature range		T_{amb}	-20 to +80	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-30 to +100	$^{\circ}\text{C}$
Power dissipation		R_{thJA}	120	mW
Lead soldering temperature	$T=5 \text{ s}$, 3 mm from body	T_{sld}	260	$^{\circ}\text{C}$



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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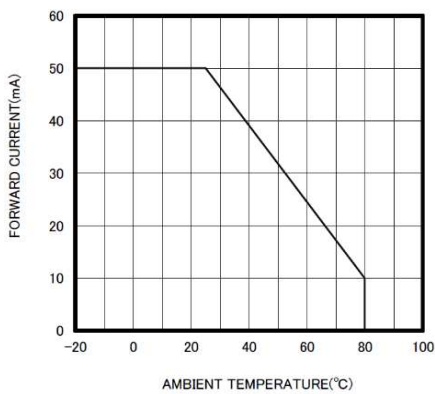
Rev. 02, 2017

Optical and Electrical Characteristics*

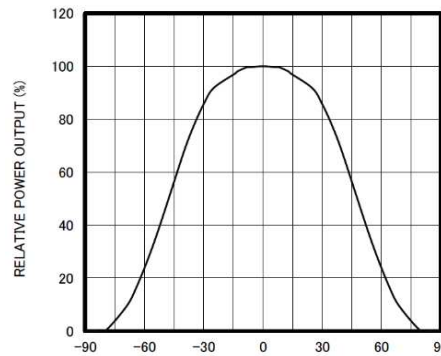
T_{amb}= 25°C, unless otherwise specified

Parameter	Test cond.	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F =20 mA	V _F		0.7	0.95	V
Forward voltage	I _F =50 mA	V _F		0.8	1.0	V
Reverse current	V _R =5 V	I _R			100	µA
Radiant power	I _F =20 mA	Φ _e		0.8		mW
Radiant power	I _F =50 mA	Φ _e		1.3		mW
Peak wavelength	I _F =20 mA	λ _p		1650		nm
FWHM	I _F =20 mA	Δλ _{0.5}		100		nm
Viewing angle	I _F =20 mA	φ		±45		deg
Switching times	I _F =20 mA	t _r , t _f		25; 45		ns

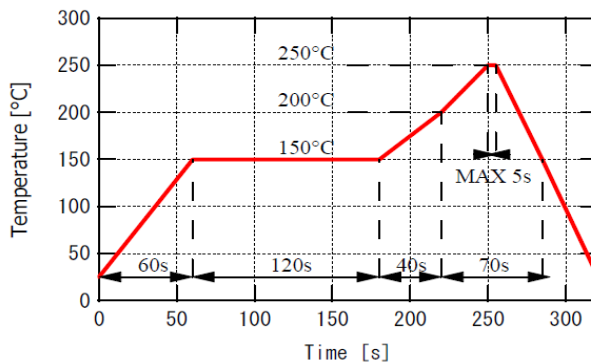
THERMAL DERATING CURVE



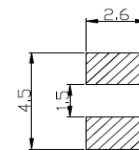
RADIATION PATTERN



Recommended reflow soldering profile



Recommended Land Layout (Unit: mm)



Art. No. 133 123



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