

EPIGAP Optronik GmbH

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Data Sheet

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Deep Red SMD-LED

EOLS-660-496

Rev. 03, 2017

Radiation	Type	Case
Deep red		SMD 3838 (1515)

<p>Unit: mm Tolerance: ±0,1</p> <p>Back side</p>	<p>Description:</p> <ul style="list-style-type: none"> - Size 3.8 (W) x 3.8 (L) x 1.0 (H) mm - Circuit substrate: AlN ceramics - Devices are RoHS conform - Lead free solderable, soldering pads: silver plated - Marking at cathode
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Maximum Ratings

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

Parameter	Test conditions	Symbol	Value	Unit
Forward current		I_F	500	mA
Peak forward current	$t_p \leq 100 \mu\text{s}, \tau = 1:10$	I_{FM}	700	mA
Reverse voltage		V_R	5	V
Reverse current		I_R	100	μA
Operating temperature range		T_{amb}	-40 to +85	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-40 to +85	$^{\circ}\text{C}$
Thermal resistance		R_{thJA}	10	K/W

Optical and Electrical Characteristics

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

Parameter	Symbol	Conditions	Min	typ	max	Unit
Forward voltage	V_F	$I_F = 350 \text{ mA}$		2.3	3.0	V
Radiant intensity	I_e	$I_F = 350 \text{ mA}$	45	110		mW/sr
Radiant power	Φ_e	$I_F = 350 \text{ mA}$	145			mW
Peak wavelength	λ_d	$I_F = 350 \text{ mA}$	650	660	670	nm



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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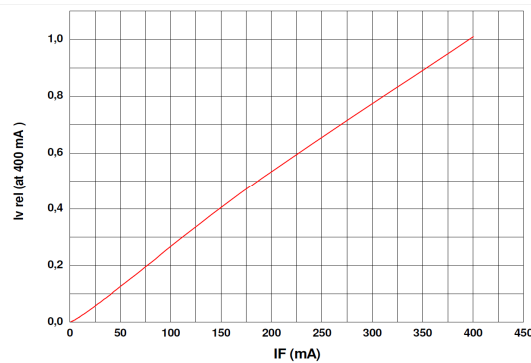


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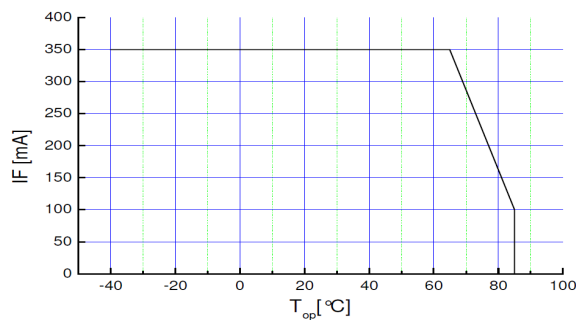
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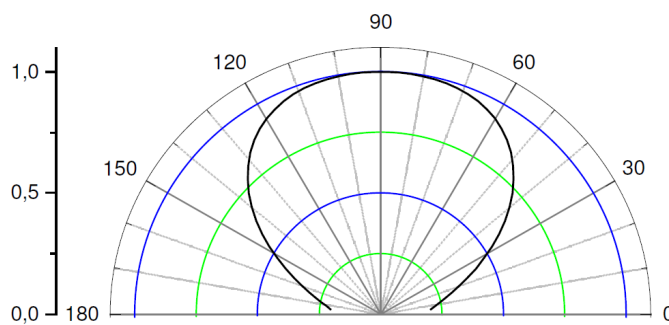
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Intensity vs. Forward Current



Forward Current vs. Operating Temperature



View Angle



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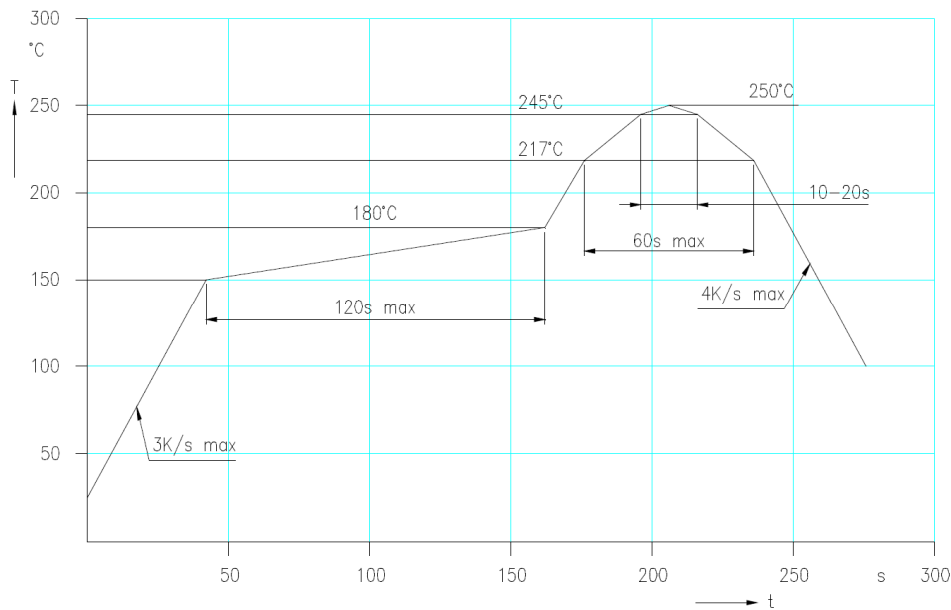
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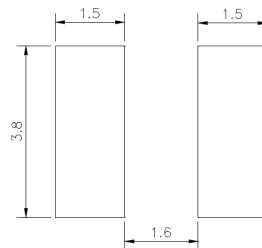
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IR reflow soldering profile for lead free soldering



recommended max. thermal resistance
device-ambient: 20 K/W

Recommended Soldering Pattern

Manual soldering:
max power of iron 25 W / 3 s / 300 °C

Art. No. 133 109



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