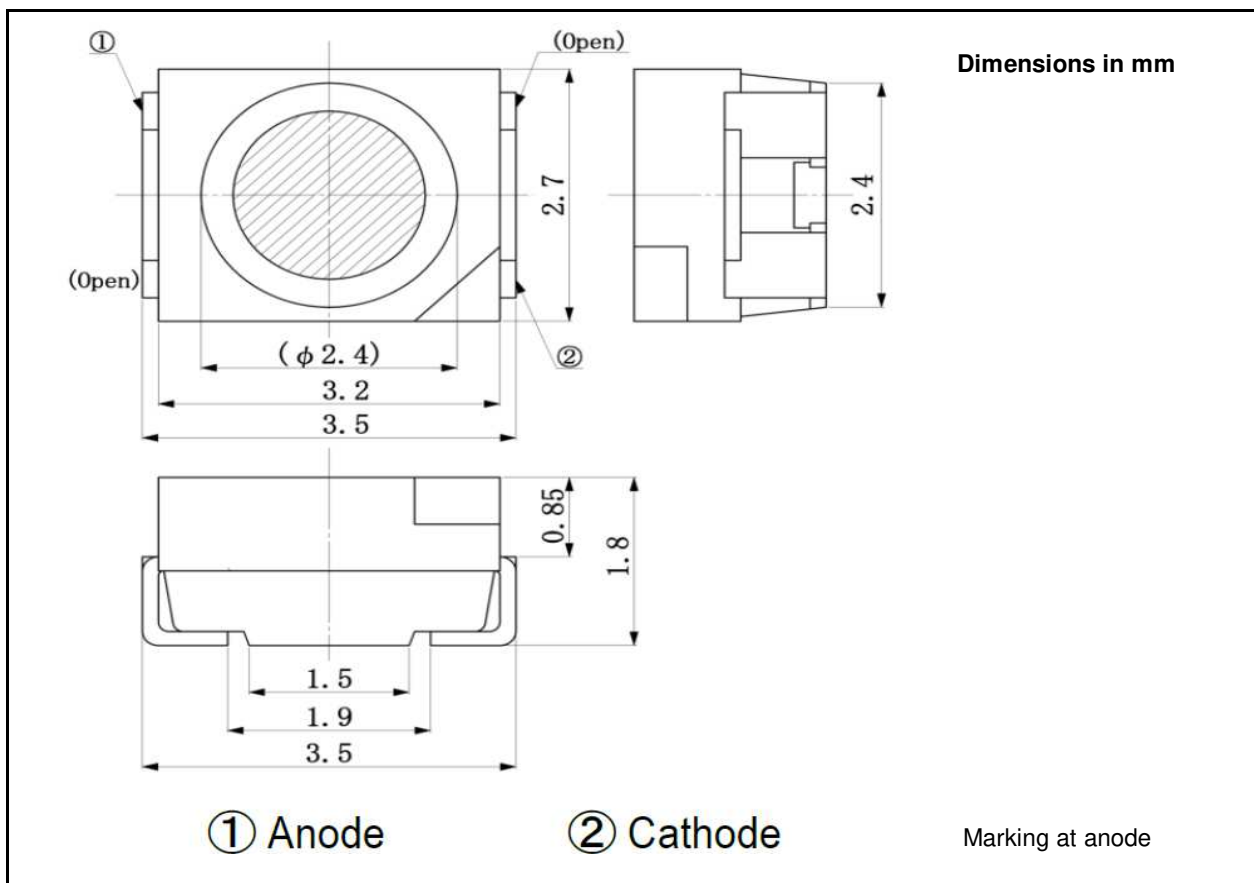


Infrared SMD-LED

EOLS-920-995

Rev. 01, 2017

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



Maximum Ratings

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

Parameter	Test Conditions	Symbol	Value	Unit
Peak forward current	t _p ≤ 100 μs, T=1 ms	I _{FP}	100	mA
Continuous forward current		I _F	80	mA
Reverse voltage		V _R	5	V
Operating temperature range		T _{amb}	-20 to +80	°C
Storage temperature range		T _{stg}	-30 to +100	°C
Power dissipation		P _D	120	mW
Thermal resistance		R _{thJA}	10	K/W
Lead soldering temperature	T=5 s, 3 mm from body	T _{slid}	260	°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.

Infrared SMD-LED

EOLS-920-995

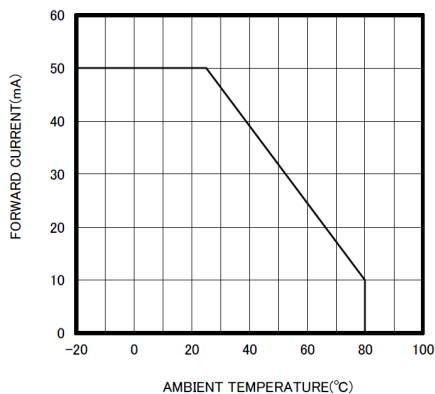
Rev. 01, 2017

Optical and Electrical Characteristics

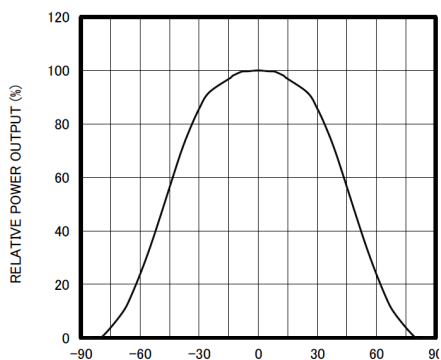
$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test cond.	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	V_F		1.25	1.5	V
Reverse current	$V_R = 5 \text{ V}$	I_R			100	μA
Radiant power	$I_F = 20 \text{ mA}$	Φ_e	4	4.5		mW
Peak wavelength	$I_F = 20 \text{ mA}$	λ_p		920		nm
FWHM	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		55		nm
Viewing angle	$I_F = 20 \text{ mA}$	ϕ		± 45		deg
Switching times	$I_F = 20 \text{ mA}$	t_r, t_f		400		ns

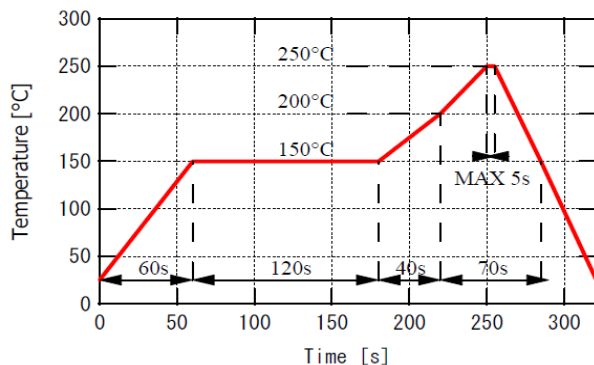
THERMAL DERATING CURVE



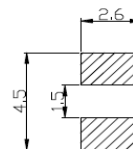
RADIATION PATTERN



Recommended reflow soldering profile



Recommended Land Layout (Unit: mm)



Art. No. 133 048



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