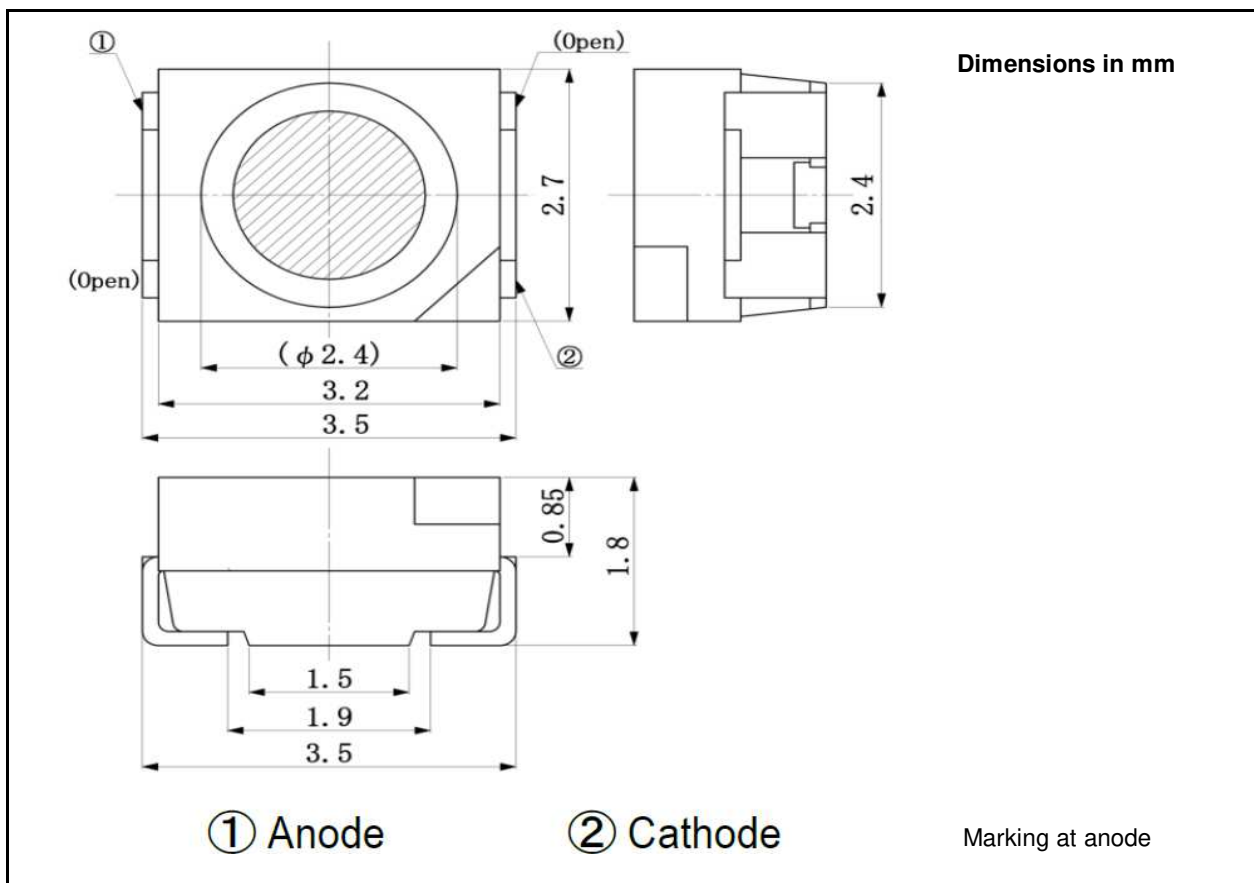


Infrared SMD-LED

EOLS-915-995

Rev. 02, 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-915-995

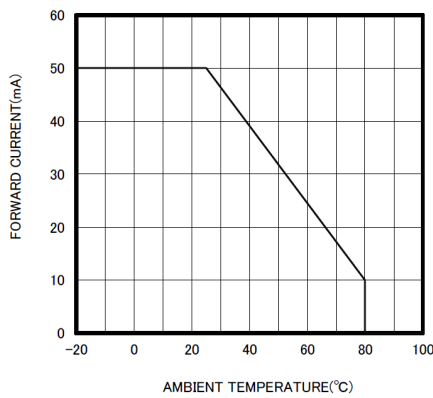
Rev. 02, 2017

Optical and Electrical Characteristics

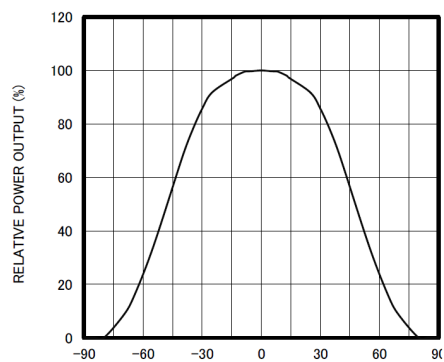
T_{amb}= 25°C, unless otherwise specified

| Parameter | Test cond. | Symbol | Min | Typ | Max | Unit |
|-----------------|-----------------------|---------------------------------|-----|------|-----|------|
| Forward voltage | I _F =20 mA | V _F | | 1.25 | 1.5 | V |
| Reverse current | V _R =5 V | I _R | | | 100 | μA |
| Radiant power | I _F =20 mA | Φ _e | 4 | 4.5 | | mW |
| Peak wavelength | I _F =20 mA | λ _p | 915 | | 920 | nm |
| FWHM | I _F =20 mA | Δλ _{0.5} | | 55 | | nm |
| Viewing angle | I _F =20 mA | φ | | ±45 | | deg |
| Switching times | I _F =20 mA | t _r , t _f | | 400 | | ns |

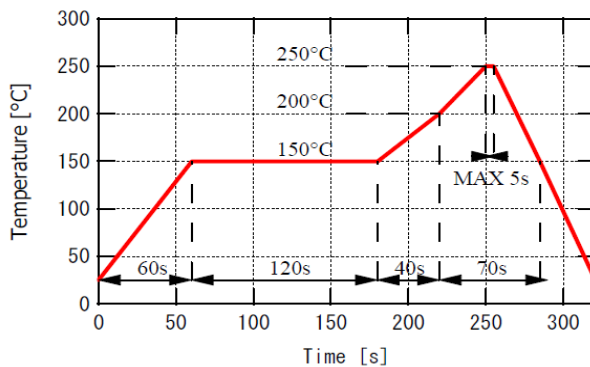
THERMAL DERATING CURVE



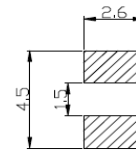
RADIATION PATTERN



Recommended reflow soldering profile



Recommended Land Layout (Unit: mm)



Art. No. 133 047



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