



FEATURES

- SMD LED with Exceptional Efficiency
- Radiant Intensity Categorized
- Tight Spectral Bandwidth
- Rugged Reduced Footprint Surface Mount Package
- Available on Tape & Reel
- Wide Operating Temperature: -40 °C to +125 °C
- Ideal for Biological Analysis, Health, Science, Medical, and Veterinary Applications

Electro-Optical Characteristics at 25 °C

Parameters	Test Conditions	Min	Typ	Max	Units
Forward Voltage	$I_F = 20 \text{ mA}$		1.8	2.2	V
Radiant Power	$I_F = 20 \text{ mA}$	1.0	2.0		mW
Radiant Efficiency	$I_F = 20 \text{ mA}$		56		%
Peak Wavelength, λ_p	$I_F = 20 \text{ mA}$		685		nm
Spectral Bandwidth at 50 %, $\Delta\lambda$	$I_F = 20 \text{ mA}$		30		nm
Reverse Breakdown Voltage, V_R	$I_R = 10 \text{ }\mu\text{A}$	5	10		V
Rise Time ²	$I_{FP} = 20 \text{ mA}$			100	nsec
Fall Time ²	$I_{FP} = 20 \text{ mA}$			40	nsec

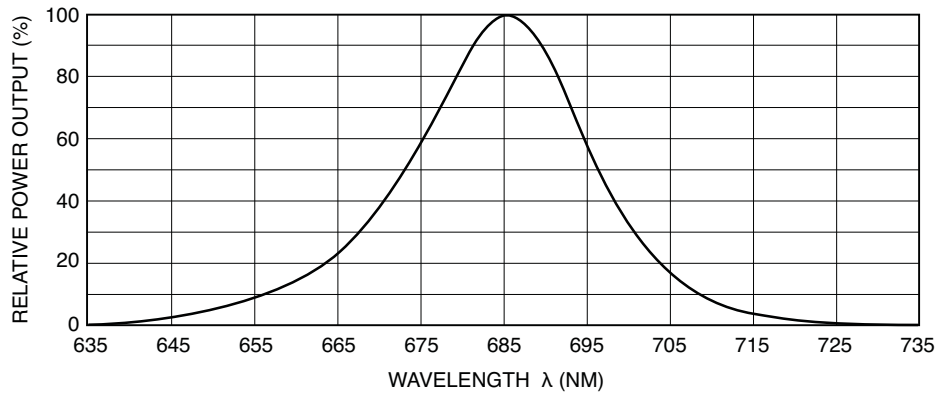
Absolute Maximum Ratings at 25°C

Parameters	Value	Units
Power Dissipation	120	mW
Continuous Forward Current	50	mA
Peak Forward Current ¹	100	mA
Storage and Operating Temperature Range	-40 to +125	°C
Maximum Junction Temperature	125	°C

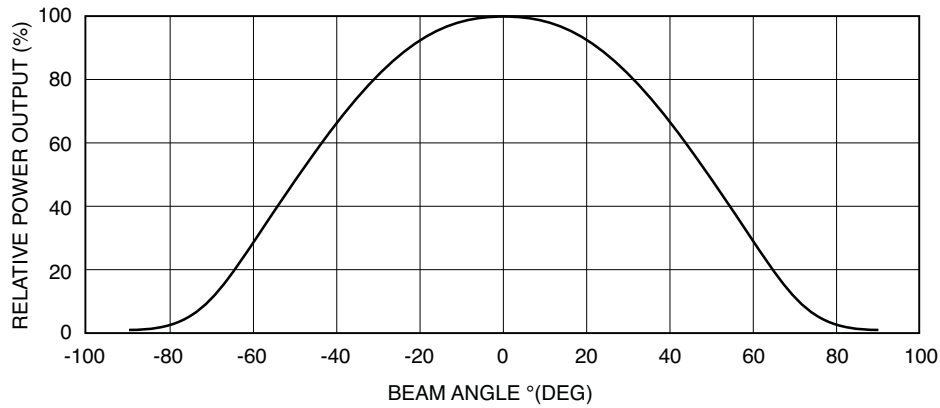
¹ 10 usec @ 300 Hz.

² Measured output with photo detector circuit.

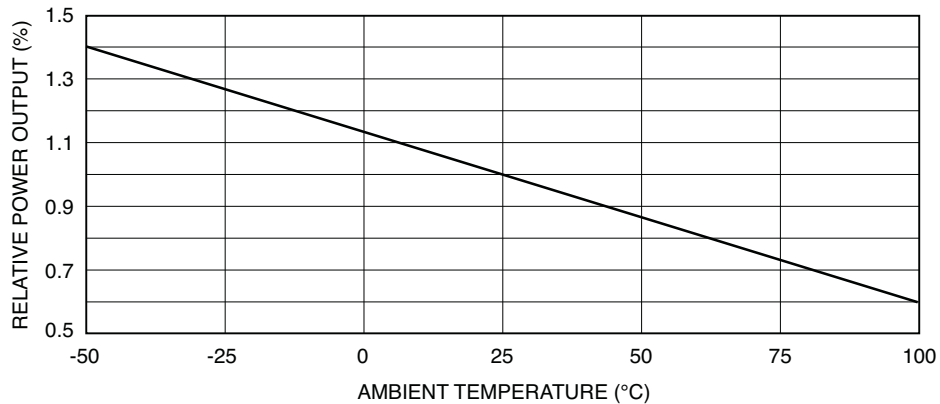
Spectral Output



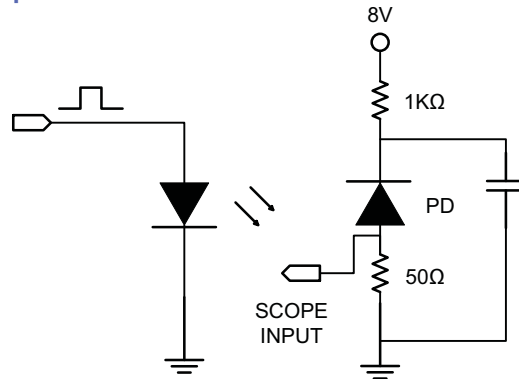
Radiation Pattern



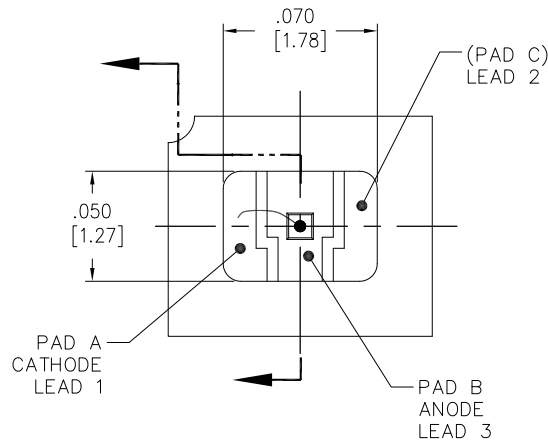
Power Output vs Temperature



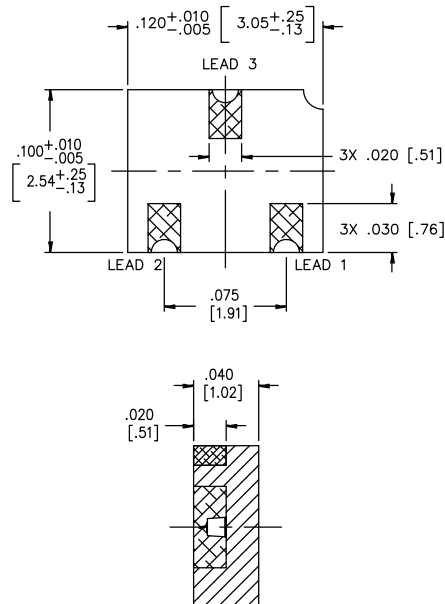
Measured Rise and Fall Time Setup



Package Information

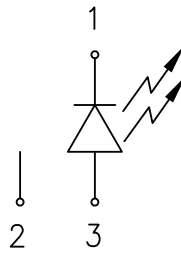


Power Output vs Temperature

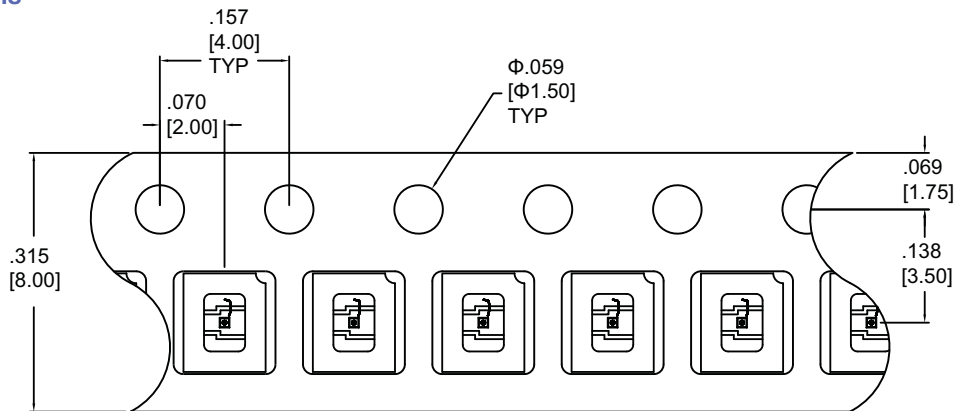


Pin Description

Pins	Lead	Description
A	1	Cathode
B	2	Ground or NC
C	3	Anode



Tape Dimensions



Dimensions are nominal values in inches unless otherwise specified.

Ordering Information

OD-2438 Deep Red SMD LED on Tape & Reel

Specifications are subject to change without prior notice.