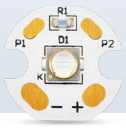
LE-S1

Light Engine

Data Sheet



Product Overview

The LE-S1 is a high-intensity focused spot light engine boasting high-intensity illumination and even light distribution to a concentrated area. It consists of one high power LED and one RTD sensor to measure the board temperature. With a compact design, it's perfect for integation into UV curing spot curing systems or other setups that require intense illumination in a small area. Customizable lenses are available to focus the light onto 3 mm, 5 mm, and 8 mm spot diamaters at a working distance of 5 mm - ideal for applications with limited working space.

The light engine is available in 3 standard wavelengths: 365, 385, 405 nm.

Specifications

Parameter	Symbol	Condition	TYP Value	Unit
Number of LEDs	N	-	1	-
Operating Ambient Temperature	T_{amb}	0-65%, non-condensing	10-40	°C
Storage Temperature	T_{stg}	Unbiased, 10-80% RH, non-condensing	-40-100	°C
Operating System Temperature	T_{opr}	I_{max}	< 85	°C
Maximum Current	I_{max}	T_{amb}, T_{opr}	1.4	A
Maximum Voltage	V_F	I_{max}, T_{opr}	3.8	V
Radiant Flux	P_O	I=14A, T_{LED}=25°C, 50% RH, λ=365nm	1.4	W
		I=14A, T_{LED} =25°C, 50% RH, λ=385nm	1.65	
		I=14A, T_{LED} =25°C, 50% RH, λ=405nm	1.63	
Full Width Half Maximum Angle	θ	I=1A, T_{LED}=25°C, 50% RH	65	°
RTD Impedance[1]	R_{TH}	T_{opr} = 25°C	1.0	kΩ

[1]Detail of the RTD sensor circuit:

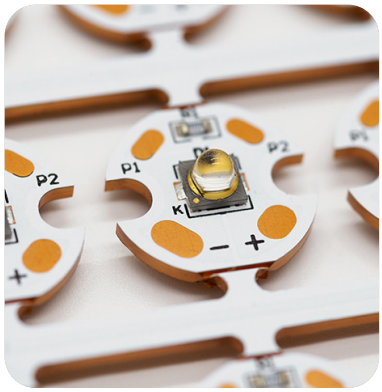
I. Material: Pt-1000

Features

- Surface mount technology
- High thermal conductivity metal core-based PCBs
- 1 high power UV LED
- 1 RTD sensor

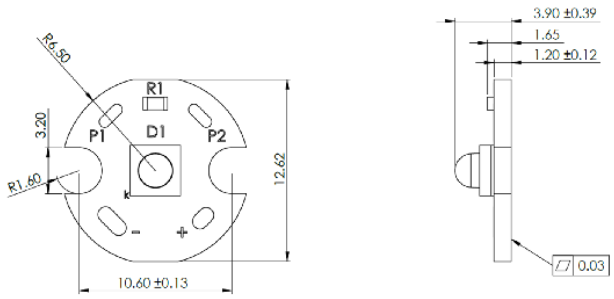
Typical Applications

- UV spot curing system
- UV torch



ALEO LE-S1 Light Engine

Dimensions



Units: mm

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