



RSL-2100

Miniature Xenon Flashlamp System



Excelitas' RSL-2100 miniature Xenon light source is ideally suited to UV-VIS-NIR applications

The RSL-2100 compact light source from Excelitas Technologies gives you all the benefits of a typical high power Xenon system in an ultra-compact package.

The RSL-2100 is a miniature, pulsed Xenon system with broadband spectrum from UV to NIR. The system operates at up to 2 watts and produces high peak intensities from 190-2000+ nm.

Similar to all pulsed Xenon systems, the RSL-2100 offers exceptional arc stability, microsecond flash duration and long life characteristics, making it an excellent choice for analytical instruments, machine vision systems, and applications where LEDs can't provide the required intensity.

Key Features

- Compact size
- High radiant intensity
- Continuous spectrum UV-VIS-IR
- Long life
- Customization is available for specific OEM needs

Applications

- Absorption analysis
- Immunoassay modules
- Fluorimetry
- Spectroradiometry
- Liquid and gas chromatography
- Colorimetry
- UV-VIS-NIR applications

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Electrical Input Specifications	
Parameter	Specification
Voltage	11-15 VDC
DC Current	325 mA Maximum RMS
Peak Current	1.0 Amps
Trigger	+5V, 20-50mA peak input, 10-100µs pulse width, leading edge trigger. Optically isolated internal series resistor = 150Ω.
Input Connector	4-Pin

Electrical Output	
Parameter	Specification
Voltage	600 ± 2% VDC Fixed
Power (Joules/sec)	2 watts max (power = joules x flash rate)
Standard Discharge Capacitor	0.047, 0.10, 0.22 µF
Flash Rate (Hz)	$F_{max} = 2/E$, where $E=1/2V^2$

Light Output	
Parameter	Specification
Spectral Range	190-2000+ nm
Stability ¹	<3% CV
Lifetime	>1x10 ⁸ Flashes

¹ CV or Coefficient of variation is defined as: $CV\% = (\text{Standard Deviation of 20 Flashes}) / (\text{Mean of 20 Flashes})$

Environmental	
Parameter	Specification
Operating Temperature	32 to 104°F (0 to 40°C)
Storage Temperature	-40 to 194°F (-40 to 90°C)
Humidity	95% RH, non-condensing
Shock and Vibration	1.5G, 5-200 Hz (Mil-STD-810C)
Safety Compliance	Designed to meet EN60950

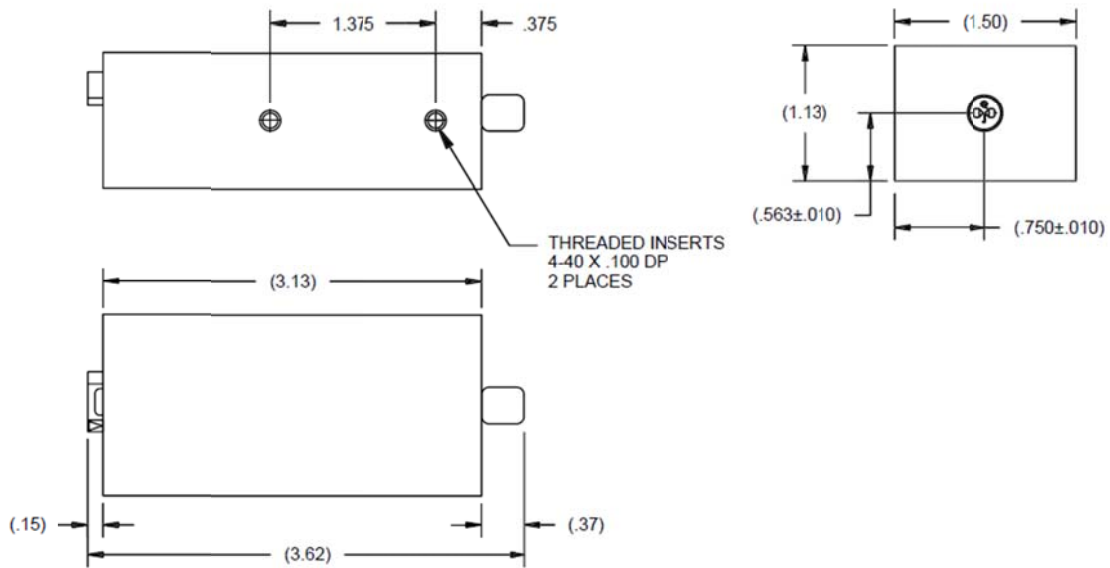
Operating Conditions		
Capacitor (µF)	Max Input/Flash (mJ)	Max Flash Rate @ 600 VDC (Hz)
0.22	40	50
0.10	18	111
0.047	8.5	235

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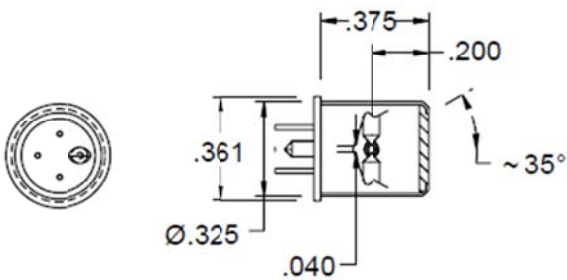
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Mechanical Dimensions

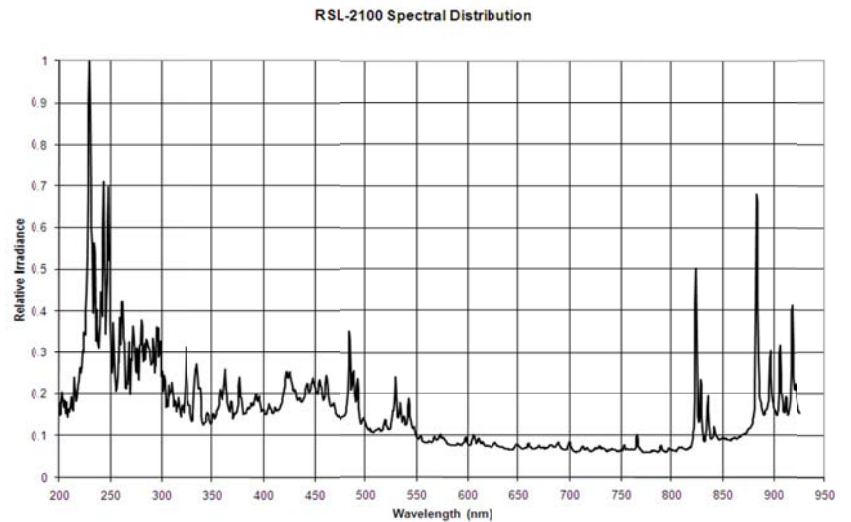
RSL-2100 Outline



RSL-2100 Lamp



Spectral Output



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Ordering Information: RSL-210A-B

Where

A = Spectral Distribution

0 = 250-2000+nm, **1** = 190-2000+nm

B = Discharge Capacitor

1 = 0.22 μ F, **2** = 0.10 μ F, **3** = 0.047 μ F

***Part Number Example:** RSL-21003. Spectral Distribution of 250-2000+nm with the 0.047 μ F discharge capacitor

NOTE: All values are nominal; specifications subject to change without notice.

About Excelitas Technologies

Excelitas Technologies is a global technology leader focused on delivering innovative, customized solutions to meet the lighting, detection and other high-performance technology needs of OEM customers.

From medical lighting to analytical instrumentation, clinical diagnostics, industrial, safety and security, and aerospace and defense applications, Excelitas Technologies is committed to enabling our customers' success in their specialty end-markets. Excelitas Technologies has approximately 3,000 employees in North America, Europe and Asia, serving customers across the world.

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