

### LINEAR HIGH POWER LED

PRELIMINARY SPEC

Part Number: KAS-4805SELS/5

Hyper Orange

### **Features**

- DIMENSION: 48mm X 5mm X 1.6mm.
- INSTANT LIGHT.
- LINEAR TYPE.
- HIGH EFFICIENCY.
- LONG OPERATING LIFE.
- LOW POWER CONSUMPTION.
- MORE ENERGY EFFICIENT THAN INCANDESCENT,
   MOST HALOGEN LAMPS, AND FLUORESCENT LAMP.
- RoHS COMPLIANT.

### Description

The package containing fifteen chips is capable of providing high brightness.

High thermal dissipation efficiency is achieved by incorporating aluminium as reflector and also substrate to ensure long operating life.

The Hyper Orange device is made with TS AllnGaP light emitting diode.

### **Applications**

Ceiling lights.

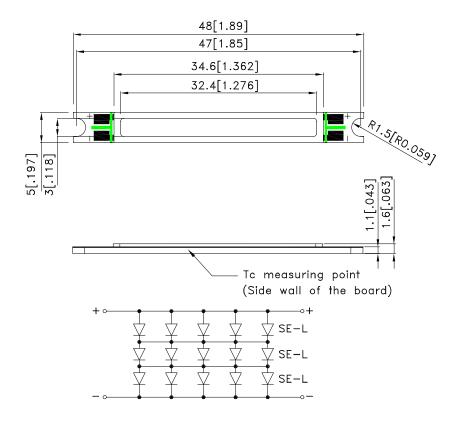
Contour lights.

Decoration lights.

General lighting.

Architectural lighting.

### **Package Dimensions**



### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25 (0.01")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.





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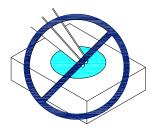
### **Handling Precautions**

Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force.

As a result, special handling precautions need to be observed during assembly using silicone encapsulated LED products. Failure to comply might leads to damage and premature failure of the LED.

1. Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry.





2. Do not stack together assembled PCBs containing exposed LEDs. Outside impact may scratch the silicone lens or damage the internal circuitry.



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### **Absolute Maximum Ratings**

Parameter	Symbol	Rating	Units	
Forward Current	lF	500	mA	
Forward Pulse Current [1]	IFP	700	mA	
Power Dissipation	Pd	4.75	W	
LED Junction Temperature	Tj	110	°C	
Operating Temperature	Topr	-30~+100	°C	
Storage Temperature	Tstg	-40~+120	°C	
Case Temperature	Tc	100	°C	

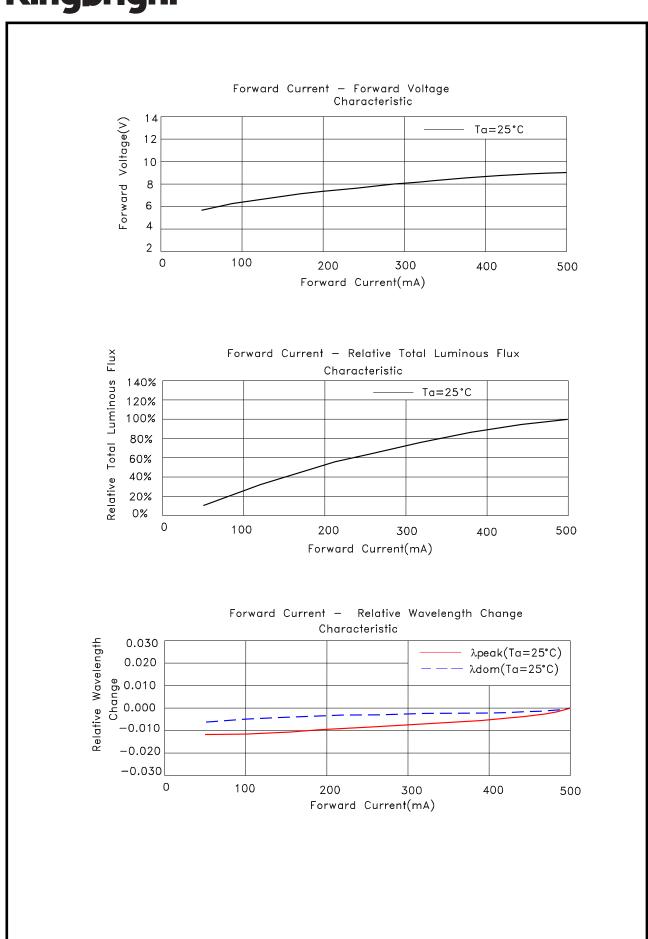
### **Electrical / Optical Characteristics**

Part Name	Device	Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
KAS-4805SELS/5 Ora		Forward Voltage [2]	VF	8.5	9	9.5	V	IF=500mA
		Luminous Flux [3]	Ф۷	60	75	-	lm	IF=500mA
		Wavelength at peak emission[4]	λpeak	1	626	-	nm	IF=500mA
		Dominant Wavelength	λdom	-	618	-	nm	IF=500mA
		Spectral bandwidth at 50% PREL MAX	Δλ1/2	-	20	-	nm	IF=500mA
		Temperature coefficient of λpeak	TCλpeak	-	0.11	-	nm/°C	IF=500mA
	Orange	Temperature coefficient of λdom	TCλdom	ı	0.09	-	nm/°C	IF=500mA
		Temperature coefficient of Forward Voltage	ΔλV <sub>F</sub> /ΔΤ	ı	-3.8	-	mV/°C	IF=500mA
		Thermal Resistance	Rth j-c	ı	3.5	-	°C/W	IF=500mA
		Emission Angle	2 θ 1/2 X direction	-	130	-	0	IF=500mA
			2 θ 1/2 Y direction	-	130	-	0	IF=500mA

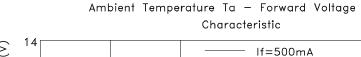
- Forward Voltage is measured with an accuracy of +/-0.1V.
   Flux is measured with an accuracy of +/-15%.
- 4. Wavelength :+/-0.1nm.

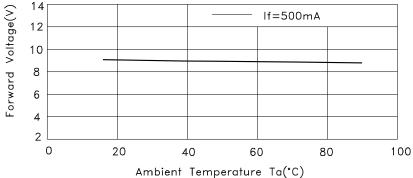
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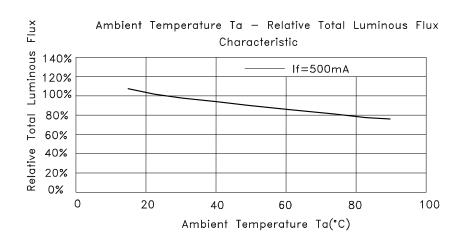
Note: 1. 1/10 Duty Cycle, 0.1ms Pulse Width.

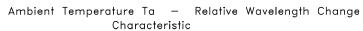


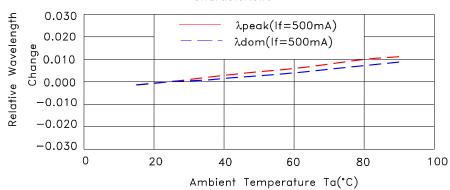
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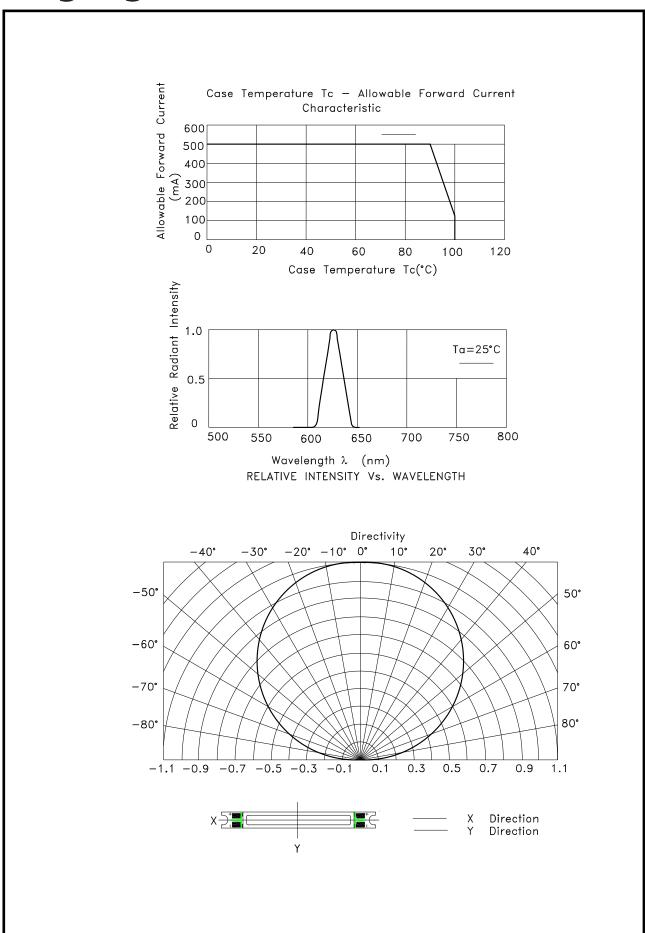




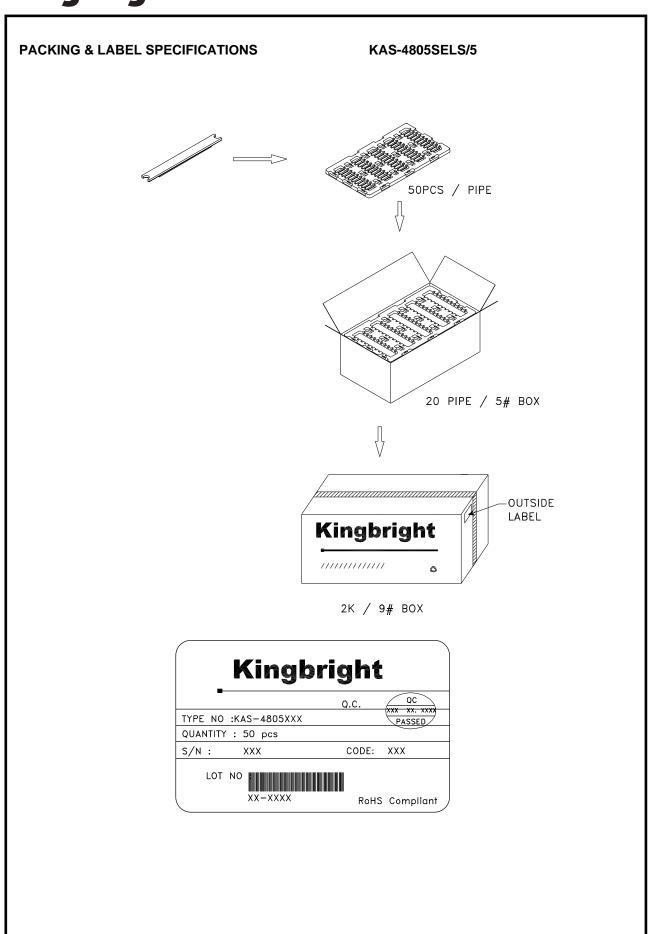


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