Luckylight

12 Segment Light Bars Displays

Technical Data Sheet

Model No.: KWL-R1230XDUGB

Features:

- ◇ Industrial standard size.
- ◇ Low power consumption.
- ◇ Categorized for luminous intensity.
- ◇ The product itself will remain within RoHS compliant Version.

Descriptions:

- ◇ The KWL-R1230 series is 12 Segment light bar display, designed for viewing distances up to 7 meters.
- ◇ These devices are available with green offering a wide possibility in design.
- ◇ These devices are made with white segments and black surface.

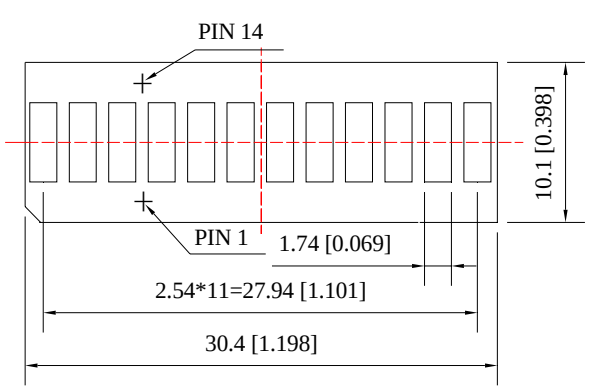
Applications:

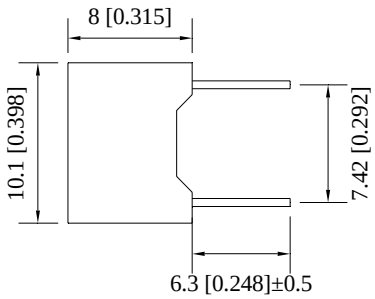
- ◇ Audio equipment.
- ◇ Instrument panels.
- ◇ Digital read out display.

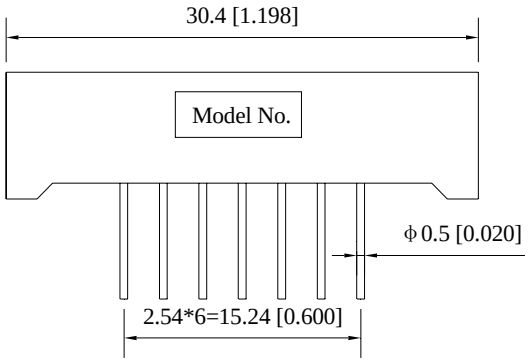
Device Selection Guide:

Model No.	Chip Material		Source Color	Descriptions
KWL-R1230ADUGB	D	GaAlAs	Super Red	Common Anode
	UG	AlGaInP	Super Yellow Green	
KWL-R1230CDUGB	D	GaAlAs	Super Red	Common Cathode
	UG	AlGaInP	Super Yellow Green	

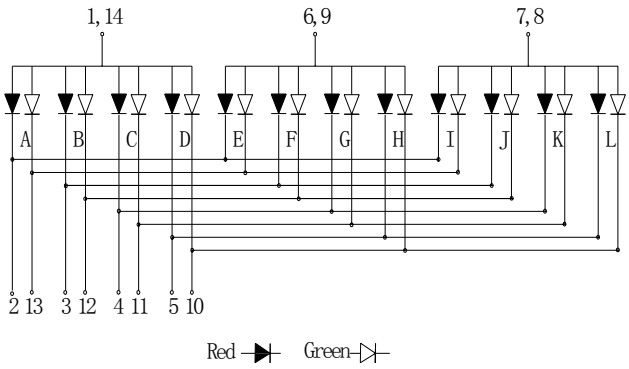
Package Dimension:



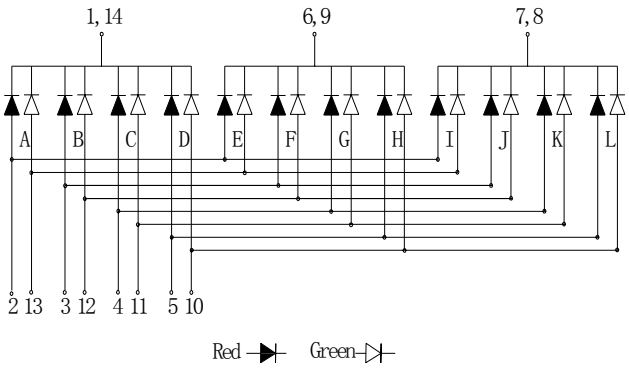




KWL-R1230ADUGB



KWL-R1230CDUGB



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 mm (.010”) unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings at Ta=25℃

Parameters	Symbol	Red	Green	Unit
Power Dissipation	PD	60	70	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFP	100	100	mA
Forward Current	IF	25	25	mA
Derating Linear From 25℃		0.4	0.4	mA/℃
Reverse Voltage	VR	5	5	V
Operating Temperature Range	Topr	-40℃ to +80℃		
Storage Temperature Range	Tstg	-40℃ to +85℃		
Soldering Temperature	Tsld	260℃ for 5 Seconds		

Electrical Optical Characteristics at Ta=25℃

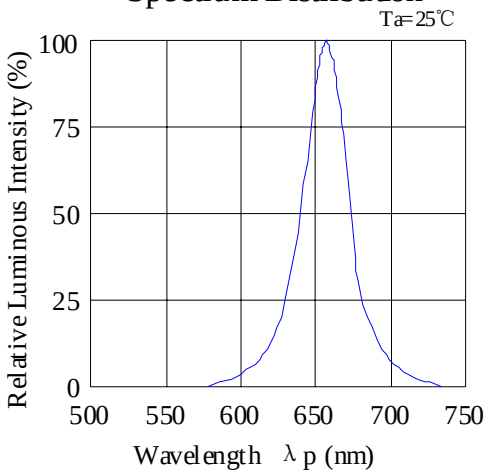
Parameters	Symbol	Color	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	Red	7.0	14.0	---	mcd	I_F=20mA (Note 1)
		Green	6.5	13.0	---		
Peak Emission Wavelength	λp	Red	---	660	---	nm	I_F=20mA
		Green	---	575	---		
Dominant Wavelength	λd	Red	---	640	---	nm	I_F=20mA (Note 2)
		Green	---	572	---		
Spectral Line Half-Width	△λ	Red	---	20	---	nm	I_F=20mA
		Green	---	20	---		
Forward Voltage	V_F	Red	---	1.8	2.4	V	I_F=20mA
		Green	---	2.2	2.8		
Reverse Current	I_R	Red	---	---	50	μA	V_R=5V

Notes:

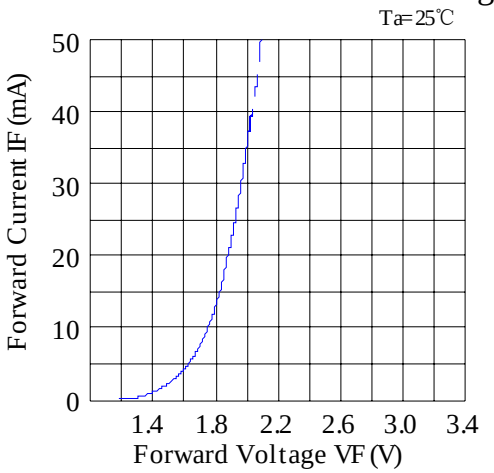
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. The dominant wavelength (λd) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

Typical Electrical / Optical Characteristics Curves
(25℃ Ambient Temperature Unless Otherwise Noted)
Red

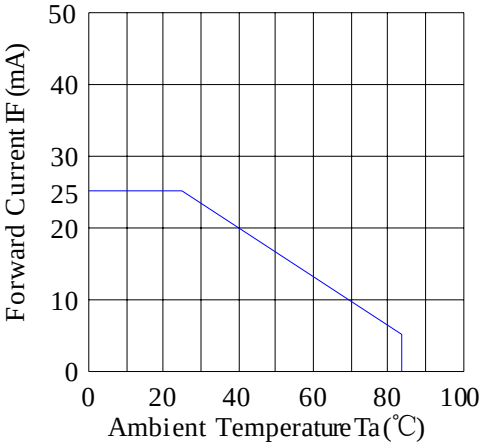
Spectrum Distribution



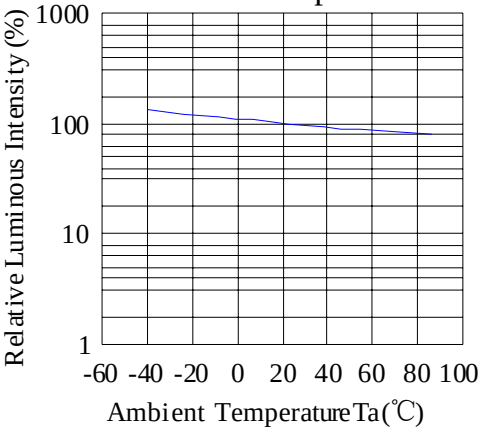
Forward Current & Forward Voltage



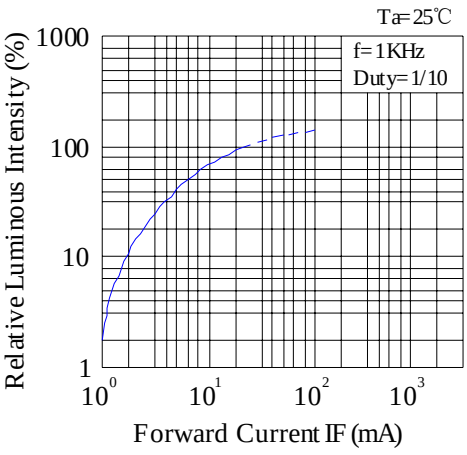
Forward Current Derating Curve



Luminous Intensity & Ambient Temperature

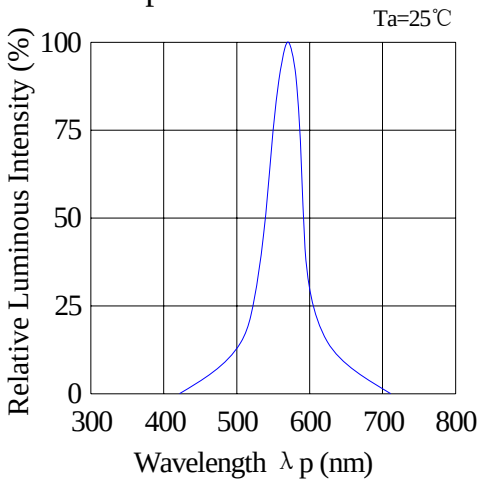


Luminous Intensity & Forward Current

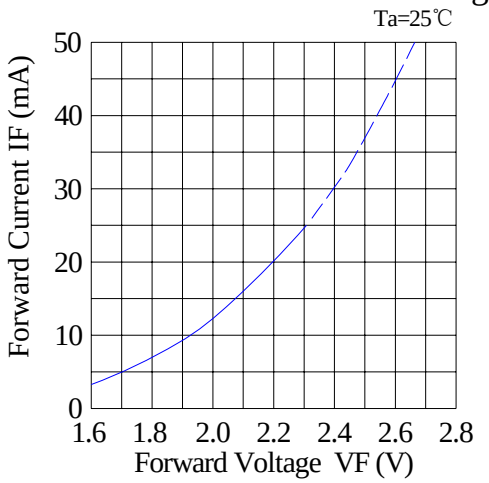


Typical Electrical / Optical Characteristics Curves
(25℃ Ambient Temperature Unless Otherwise Noted)
Green

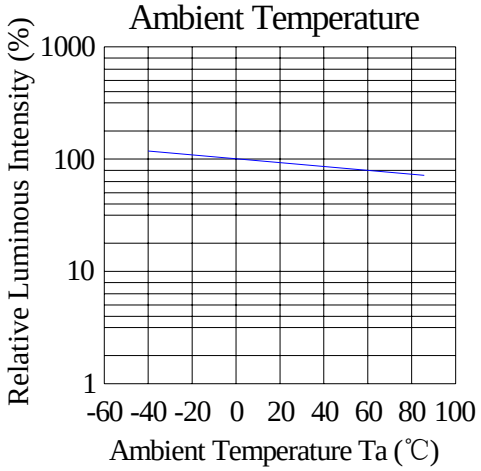
Spectrum Distribution



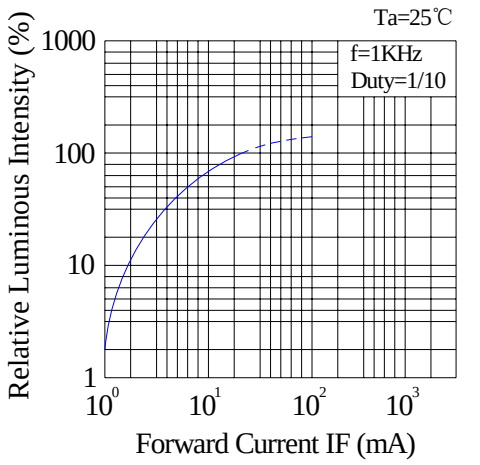
Forward Current & Forward Voltage



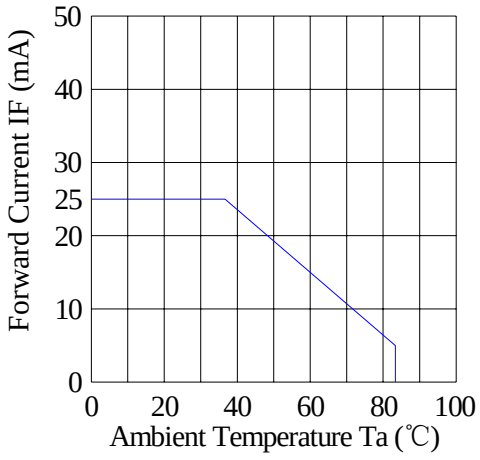
Luminous Intensity & Ambient Temperature



Luminous Intensity & Forward Current



Forward Current Derating Curve



Please read the following notes before using the datasheets:

1. Over-current-proof

Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen).

2. Storage

2.1 If the package contains a moisture proof bag inside, please don't open the package before using.

2.2 Before opening the package, the LEDs should be kept at 30℃ or less and 80%RH or less.

2.3 The LEDs should be used within a year.

2.4 After opening the package, the LEDs should be kept at 30℃ or less and 60%RH or less.

3. Soldering Iron

Each terminal is to go to the tip of soldering iron temperature less than 260℃ for 5 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.

4. Soldering

When soldering, for Lamp without stopper type and must be leave a minimum of 3mm clearance from the base of the lens to the soldering point.

To avoided the Epoxy climb up on lead frame and was impact to non-soldering problem, dipping the lens into the solder must be avoided.

Do not apply any external stress to the lead frame during soldering while the LED is at high temperature.

Recommended soldering conditions:

Soldering Iron		Wave Soldering	
Temperature Soldering Time	300℃ Max. 3 sec. Max. (one time only)	Pre-heat Pre-heat Time Solder Wave Soldering Time	100℃ Max. 60 sec. Max. 260℃ Max. 5 sec. Max.

Note: Excessive soldering temperature and / or time might result in deformation of the LED lens or catastrophic failure of the LED.

5. Repairing

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used. It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for LED Lighting Development Tools ***category:***

Click to view products by Adafruit ***manufacturer:***

Other Similar products are found below :

MIC2870YFT EV ADP8860DBCP-EVALZ LM3404MREVAL ADM8843EB-EVALZ TDGL014 ISL97682IRTZEVALZ LM3508TLEV EA6358NH MAX16826EVKIT MAX16839EVKIT+ TPS92315EVM-516 MAX1698EVKIT MAX6956EVKIT+ OM13321,598 DC986A DC909A DC824A STEVAL-LLL006V1 IS31LT3948-GRLS4-EB 104PW03F PIM526 PIM527 MAX6946EVKIT+ MAX20070EVKIT# MAX21610EVKIT# MAX20090BEVKIT# MAX20092EVSYS# PIM498 AP8800EV1 ZXLD1370/1EV4 MAX6964EVKIT MAX25240EVKIT# MAX25500TEVKITC# MAX77961BEVKIT06# 1216.1013 TPS61176EVM-566 TPS61197EVM TPS92001EVM-628 1270 1271.2004 1272.1030 1273.1010 1278.1010 1279.1002 1279.1001 1282.1000 1293.1900 1293.1800 1293.1700 1293.1500