

T-1 (3mm) RIGHT ANGLE LED INDICATOR

Part Number: L-710A8RS/1ID

High Efficiency Red

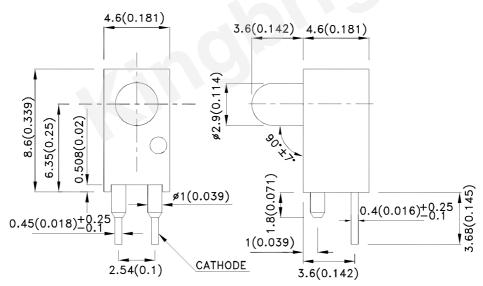
Features

- Pre-trimmed leads for pc mounting.
- Pillars are designed for positioning the housing on P.C. board.
- Black case enhances contrast ratio.
- Wide viewing angle.
- High reliability life measured in years.
- Housing UL rating:94V-0.
- Housing material: type 66 nylon.
- RoHS compliant.

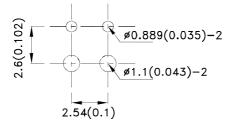
Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

Package Dimensions



RECOMMENDED PCB LAYOUT



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.25(0.01") unless otherwise noted.
- 3. Lead spacing is measured where the leads emerge from the package.4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

SPEC NO: DSAE7182 **REV NO: V.11A DATE: SEP/26/2013** PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: D.N.Huang ERP: 1102007290

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 10mA		Viewing Angle [1]
		,	Min.	Тур.	201/2
L-710A8RS/1ID	High Efficiency Red (GaAsP/GaP)	Red Diffused	12	25	40°
			*6	*12	

- 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	IF=20mA
λD [1]	Dominant Wavelength	High Efficiency Red	617		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	IF=20mA
С	Capacitance	High Efficiency Red	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red	2	2.5	V	IF=20mA
lr	Reverse Current	High Efficiency Red		10	uA	VR = 5V

- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

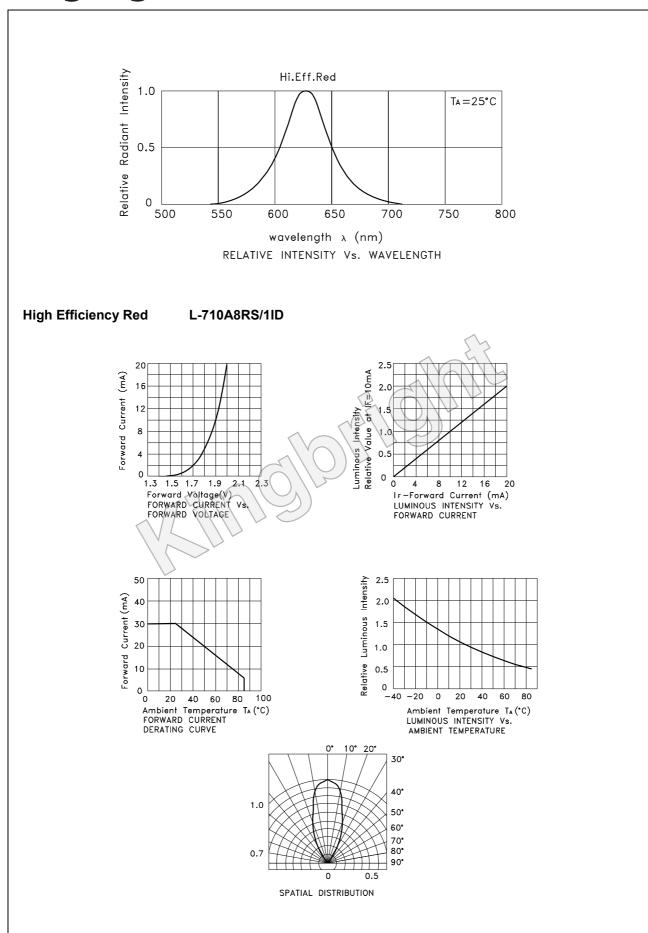
Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	160	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
 5mm below package base.

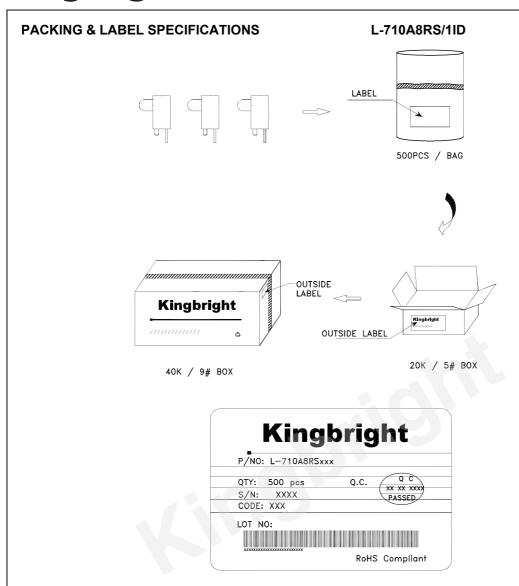
DATE: SEP/26/2013 SPEC NO: DSAE7182 **REV NO: V.11A** PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: D.N.Huang ERP: 1102007290

Luminous intensity/ luminous Flux: +/-15%.
 *Luminous intensity value is traceable to the CIE127-2007 compliant national standards.



 SPEC NO: DSAE7182
 REV NO: V.11A
 DATE: SEP/26/2013
 PAGE: 3 OF 5

 APPROVED: WYNEC
 CHECKED: Allen Liu
 DRAWN: D.N.Huang
 ERP: 1102007290



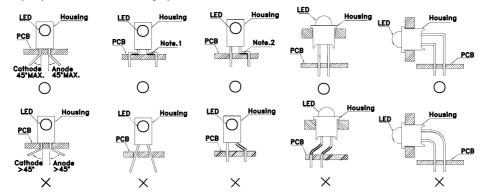
Terms and conditions for the usage of this document

- 1. The information included in this document reflects representative usage scenarios and is intended for technical reference only.
- 2. The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
- 3. When using the products referenced in this document, please make sure the product is being operated within the environmental and electrical limits specified in the datasheet. If customer usage exceeds the specified limits, Kingbright will not be responsible for any subsequent issues.
- 4. The information in this document applies to typical usage in consumer electronics applications. If customer's application has special reliability requirements or have life-threatening liabilities, such as automotive or medical usage, please consult with Kingbright representative for further assistance.
- 5. The contents and information of this document may not be reproduced or re-transmitted without permission by Kingbright.
- 6.All design applications should refer to Kingbright application notes available at http://www.kingbright.com/application_notes

SPEC NO: DSAE7182 REV NO: V.11A DATE: SEP/26/2013 PAGE: 4 OF 5
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: D.N.Huang ERP: 1102007290

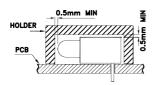
PRECAUTIONS

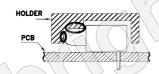
1. The lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement. Lead—forming may be required to insure the lead pitch matches the hole pitch. Refer to the figure below for proper lead forming procedures.



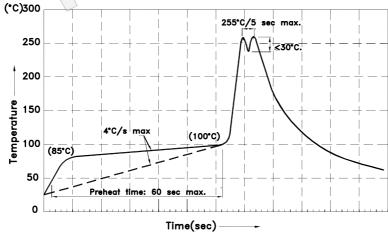
" \bigcirc " Correct mounting method " \times " Incorrect mounting method

2. During soldering, component covers and holders should leave clearance to avoid placing damaging stress on the LED during soldering.





- 3. The tip of the soldering iron should never touch the lens epoxy.
- 4. Through—hole LEDs are incompatible with reflow soldering.
- 5. If the LED will undergo multiple soldering passes or face other processes where the part may be subjected to intense heat, please check with Kingbright for compatibility.
- 6. Recommended Wave Soldering Profiles:



1.Recommend pre—heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C

2.Peak wave soldering temperature between 245°C \sim 255°C for 3 sec (5 sec max).

 $3.\mbox{Do}$ not apply stress to the epoxy resin while the temperature is above $85\mbox{^{\circ}C}.$

4.Fixtures should not incur stress on the component when mounting and during soldering process.

5.SAC 305 solder alloy is recommended.

6.No more than one wave soldering pass.

SPEC NO: DSAE7182 REV NO: V.11A DATE: SEP/26/2013 PAGE: 5 OF 5
APPROVED: WYNEC CHECKED: Allen Liu DRAWN: D.N.Huang ERP: 1102007290

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for LED Circuit Board Indicators category:

Click to view products by Kingbright manufacturer:

Other Similar products are found below:

568-0200-132F 568-0701-841F 568-0734-832F 569-0312-300F 591-2001-107F 592-2222-302F 592-2424-302F LTL-4221NH129 LTL-42DGNMHDP1 LTM-260-5HT H131CSRT-120 HLMP1503108F HLMP1521101 HLMP1523802F HLMP1700101F HLMP1700104F HLMP1790105F BHA-1564-G SMF-HM1530YD-305 SSF-LXH103SUGD-04 AM2520EHSGD HLMP1301104F HLMP1385101F HLMP1421101 HLMP1503103F HLMP1503104F HLMP1700102F HLMP1700106F HLMP1700107F HLMP1790101F HLMP1790103F LTL-4211NHBP 5320F7 5330H7 5350T7 5352T1-5VLC 5352T5-5VLC 5370T7LC 550-1112F 550-3107-010F 551-0206-003F 551-0207-815F 551-0212-801F 551-2802F 552-0794-810F 552-0821F 552-6033-200F 553-0001-808F 553-0122-818F 553-0171F