EN: This Datasheet/Document is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

Technical Data Sheet

Model No.: SH5463AW-14

Features:

- ◇ 0.56″ (inch) digit height.
- ◇ Excellent segment uniformity.
- ◇ Sold state reliability.
- ◇ Industrial standard size.
- ◇ Low power consumption.
- ◇ The product itself will remain within RoHS compliant Version.

Descriptions:

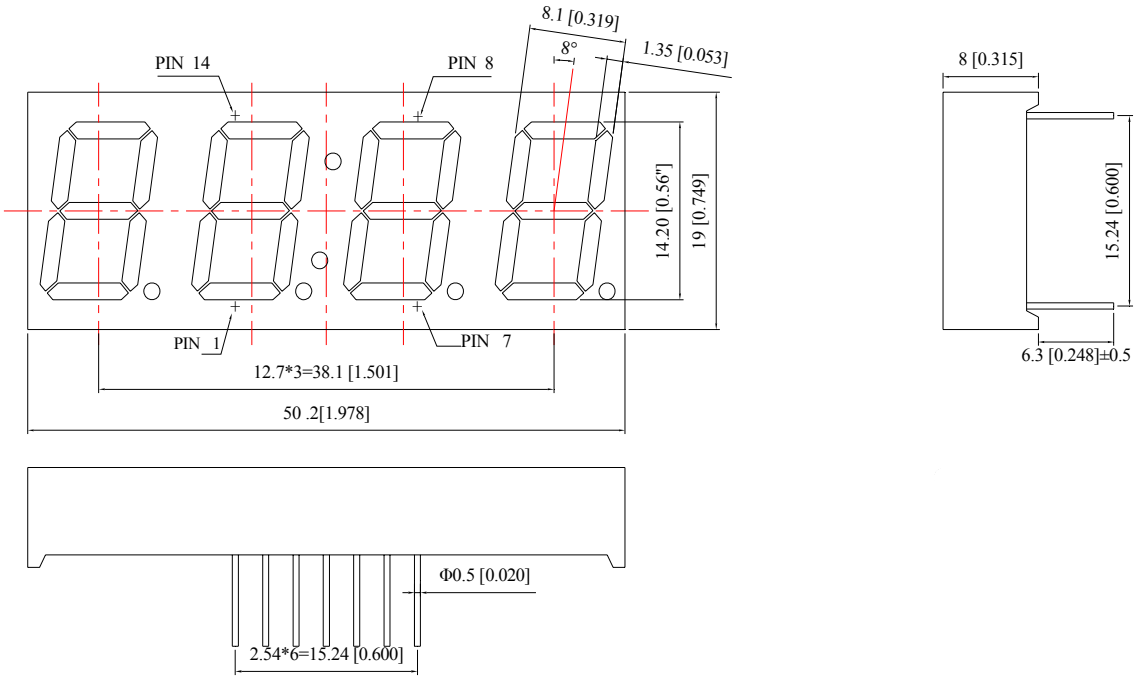
- ◇ These displays provide excellent reliability in bright ambient light.
- ◇ These devices are made with White segments and black surface

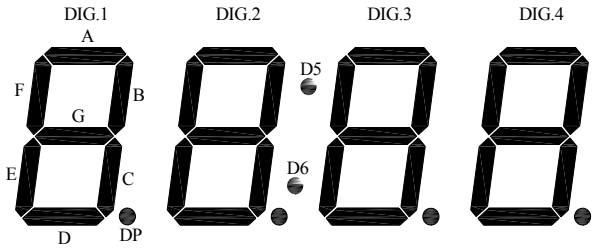
Applications:

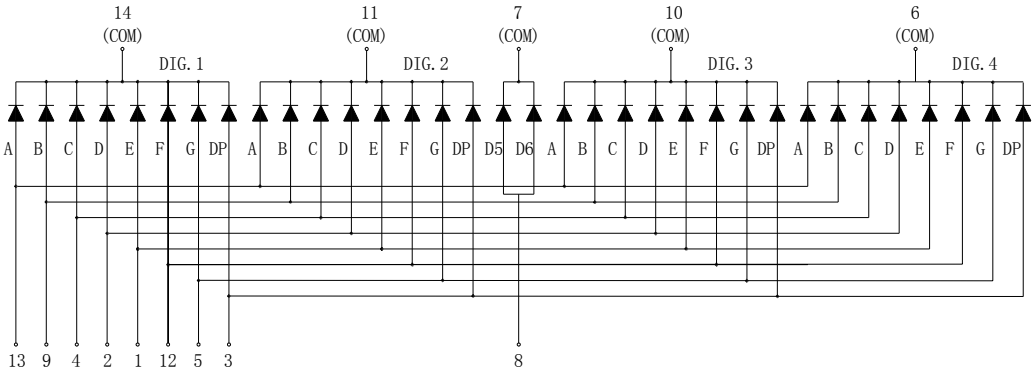
- ◇ Audio equipment.
- ◇ Instrument panels.
- ◇ Digital read out display.

Model No.	Chip Material	Source Color	Description
SH5463AW-14	AlGaInP	Hyper Red	Common Cathode

Package Dimension:







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	Max.	Unit
Power Dissipation Per Segment	PD	100	mW
Peak Forward Current Per Segment (1/10 Duty Cycle, 0.1ms Pulse Width)	IFP	100	mA
Forward Current Per Segment	IF	25	mA
Dating Linear From 50□		0.4	mA/□
Reverse Voltage	VR	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□

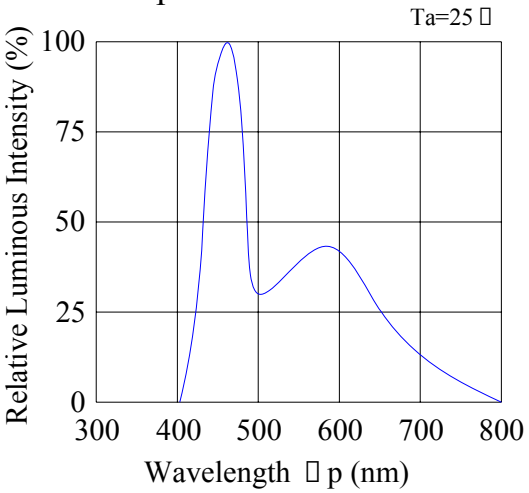
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity (Note 1) *	IV	15.0	30.0	---	mcd	IF=20mA
Luminous Intensity Matching Ratio (Segment To Segment)	I_{v-m}	---	---	2:1		IF=10mA
Chromaticity Coordinates (Note 2)	X	---	0.28	---		IF=20mA
	Y	---	0.29	---		
Forward Voltage	VF	---	3.2	4.0	V	IF=20mA
Reverse Current	IR	---	---	50	μA	V_R=5V

Notes:

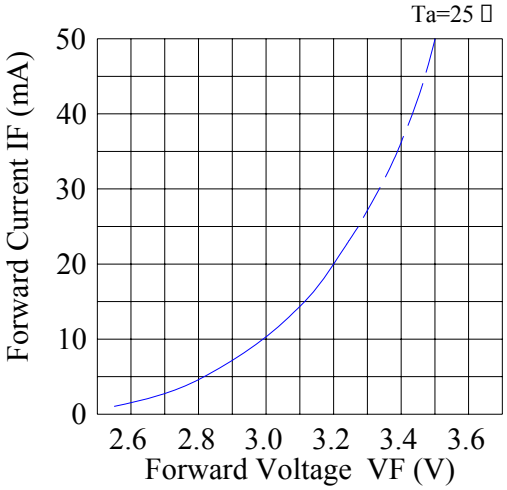
1. Luminous Intensity Measurement allowance is ± 10%.
2. It use many parameters that correspond to the CIE 1931 2°. X, Y, and Z are CIE 1931 2° values of Red, Green and Blue content of the measurement.

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

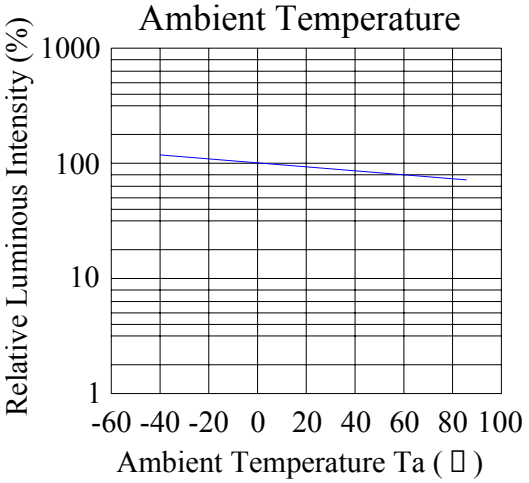
Spectrum Distribution



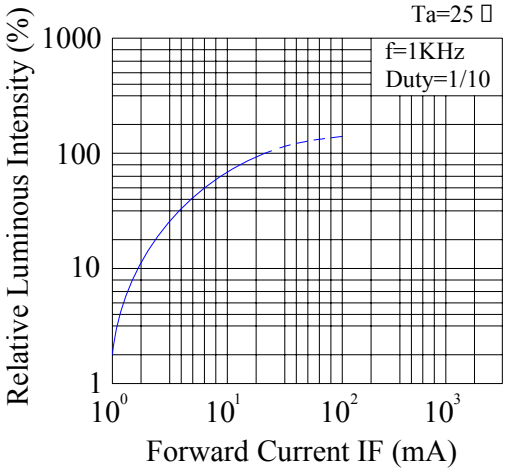
Forward Current & Forward Voltage



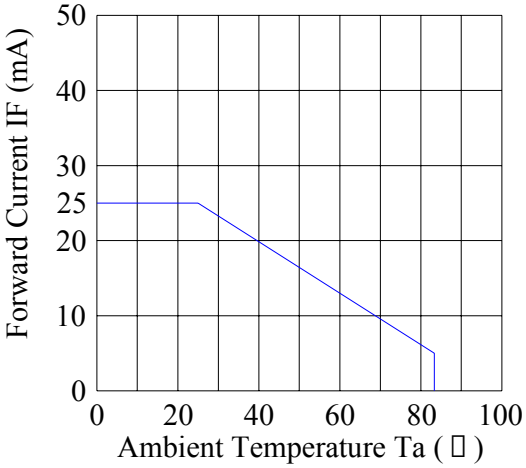
Luminous Intensity & Ambient Temperature



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.