PRODUCT SPECIFICATION

Model No.: FYLS-2011AUHR-21

Descriptions & Features:
■0.20 Inch (5.08mm) digit height, Single Digit SMD Display
■Common Cathode
■Emitting Color：Ultra Hi Red
■Chip Material:AlGaInP
■Gray Face
■White Segment

CUSTOMER APPROVED SIGNATURES	APPROVED BY	SALES BY	PREPARED BY
		Foryard S011 2018.09.14	Foryard E003 2018.09.14

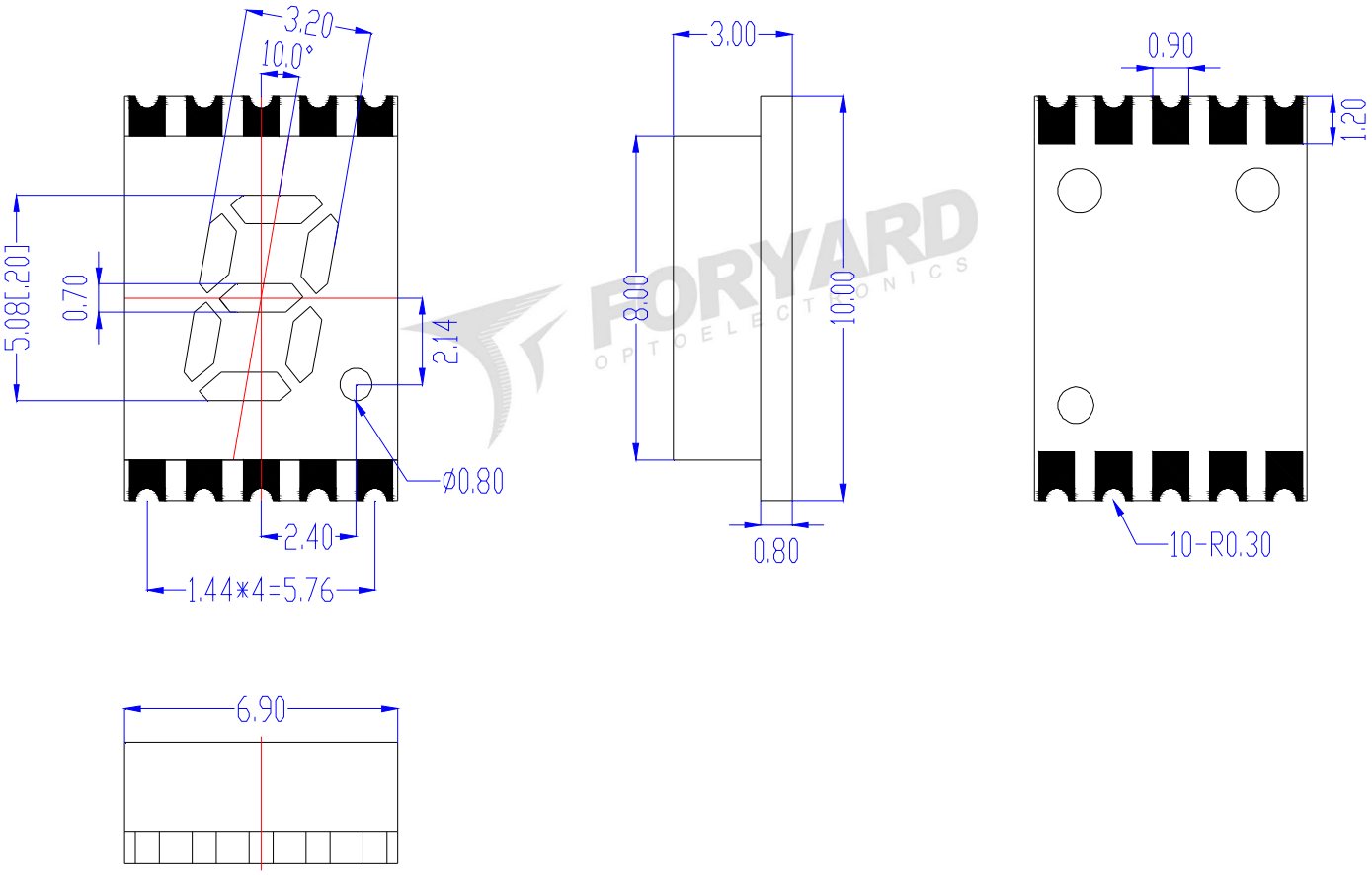
NINGBO FORYARD OPTOELECTRONICS CO.,LTD
Add:NO.115 Qixin Road Ningbo Zhejiang China **Zip:**315051
Tel: 0086-574-87933652 87927870 87922206
Fax: 0086-574-87927917
E-mail: Sales@foryard.com (General)
Http://www.foryard.com

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■ Features -

1. 0.30 inch (7.62mm) digit height.
2. RoHS compliant.
3. Low current operation.
4. Low power consumption.
5. Easy mounting on P.C. board.

■ Mechanical Dimensions

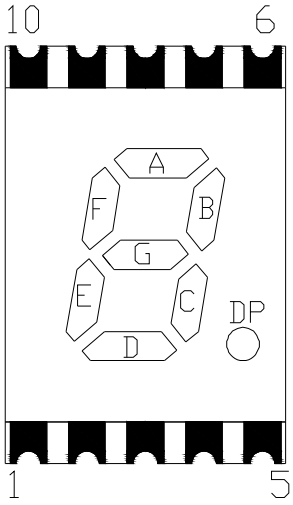


Notes:

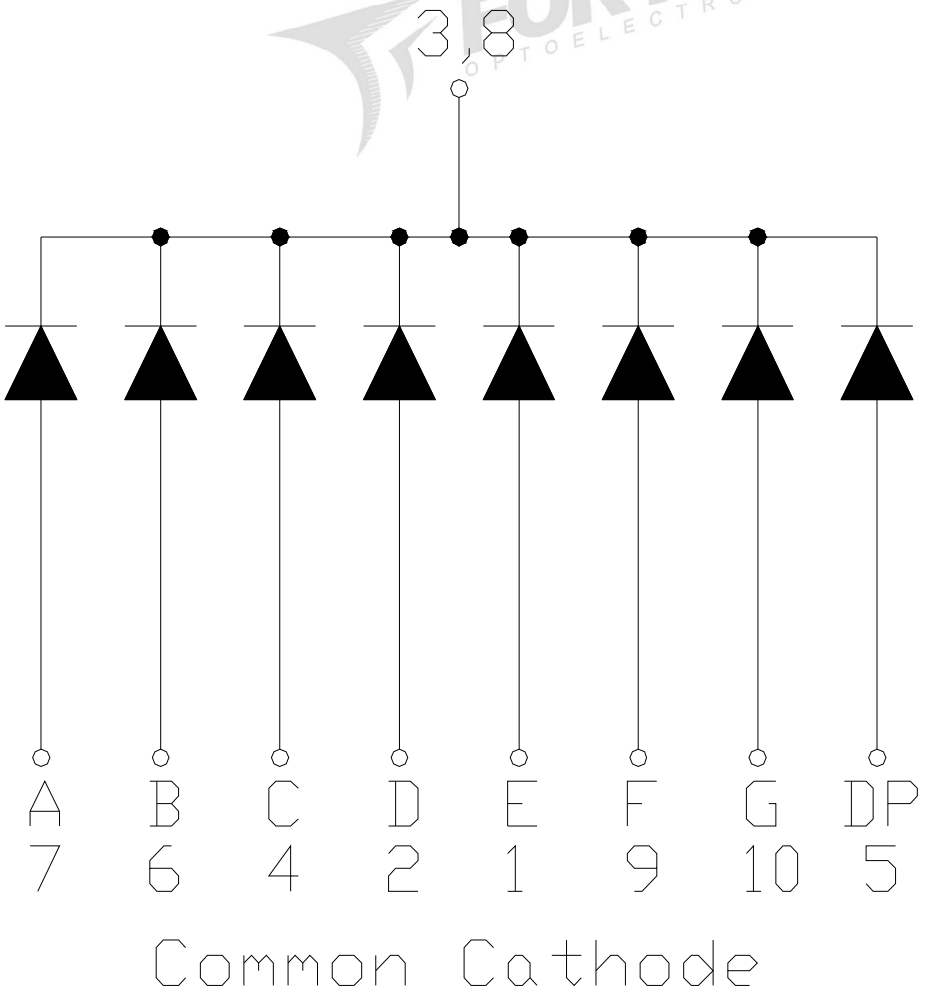
1. All dimensions are in millimeters (inches)
2. Dimension in millimeter [inch], tolerance is ±0.25 [.010] and angle is ±1° unless otherwise noted.
3. Bending≤Length*1%.
4. The specifications,characteristics and technical data described in the datasheet are subject to change without prior notice.

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■All Light On Segments Feature & Pad Position



■ Internal Circuit Diagrams



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■ Absolute maximum ratings

(Ta=25℃)

Parameter	Symbol	Test Condition	Value		Unit
			Min	Max	
Reverse Voltage	VR	IR=30	5	—	V
Forward Current	IF	—	—	30	mA
Power Dissipation	Pd	—	—	100	mW
Pulse Current	Ipeak	Duty=0.1mS,1KHz	—	150	mA
Operating Temperature	Topr	—	-40	+85	℃
Storage Temperature	Tstr	—	-40	+85	℃

■ Electrical-Optical Characteristics

● Color Code & Chip Characteristics:(Test Condition:IF=10mA) (Ta=25℃)

Emitting Color		Dice Material	Peak Wave Length(λ_P)	Spectral Line halfwidth($\Delta\lambda$1/2)	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd
					Typ	Max	
UHR	Ultra Hi Red	AlGaInP	640nm	20nm	1.90	2.50	30~60
Segment-to-Segment Luminous Intensity ratio(Iv-M) 1.5:1							

Note:

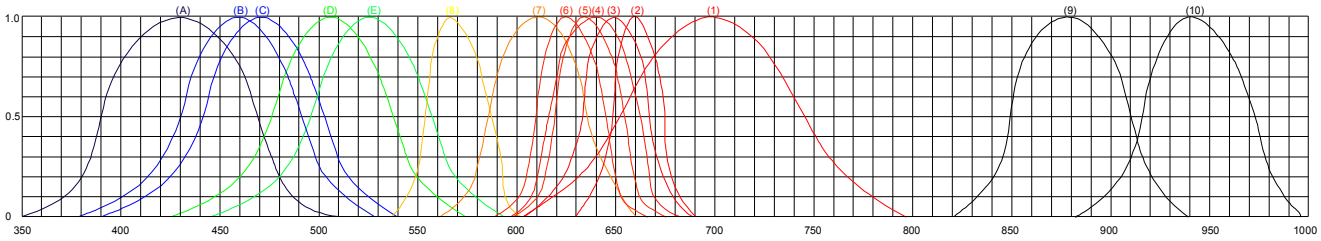
1.Luminous Intensity is based on the Foryard standards.

2.Pay attention about static for InGaN

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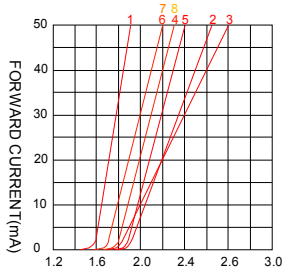
■ Typical Electrical / Optical Characteristics Curves

(Ta = 25℃ Unless Otherwise Noted)

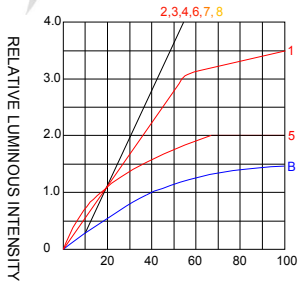


Wavelength(nm)
RELATIVE INTENSITY Vs WAVELENGTH(λp)

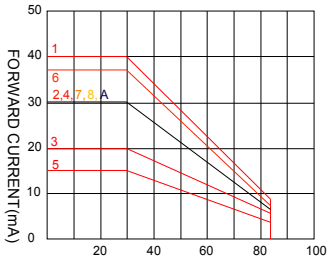
(1)-GaP 700nm/Red
(2)-AlGaAs/SH 660nm/Hi Red
(3)-AlGaAs/DH 650nm/Super Red
(4)-AlGaInP/640nm/Ultra Hi Red
(5)-AlGaInP/635nm/Ultra Red
(6)-GaAlP/AlGaInP/625nm/Orange
(7)-GaAsP/AlGaInP 610nm/Amber
(8)-GaP 570nm/Yellow Green
(9)-GaAlAs 880mm
(10)-GaAs/GaAs & GaAlAs/GaAs 940nm
(A)-GaN/SiC 430nm/Blue
(B)-InGaN/SiC 460nm/Blue
(C)-InGaN/SiC 470nm/Blue
(D)-InGaN/SiC 505nm/Ultra Green
(E)-InGaN/SiC 525nm/Ultra Green



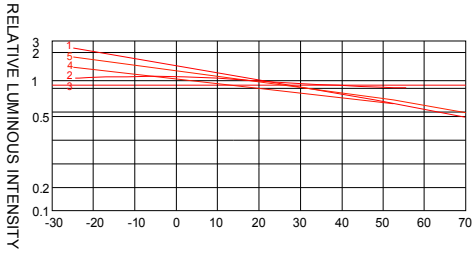
FORWARD VOLTAGE(Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



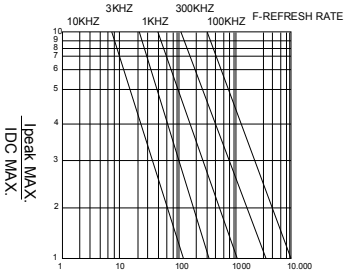
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS FORWARD
CURRENT



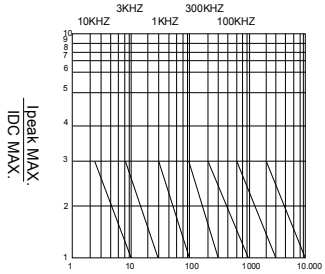
AMBIENT TEMPERATURE Ta(℃)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE
Ta(°C)



tp-PULSE DURATION uS
(1,2,3,4,6,8,B,D,J,K)

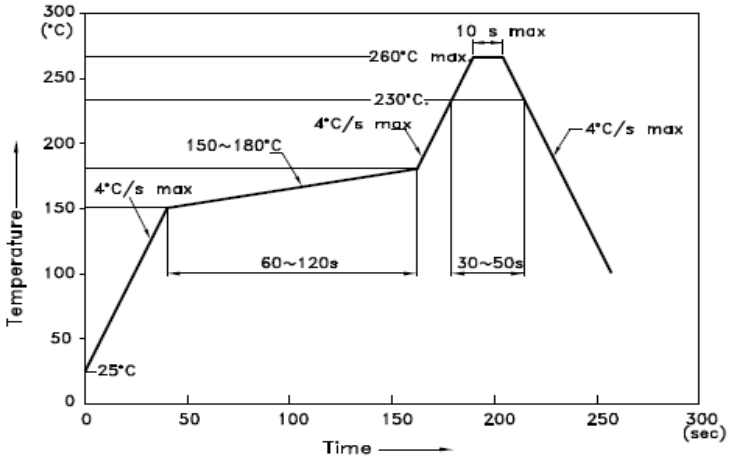


tp-PULSE DURATION uS
(5)

NOTE:25°C free air temperature unless otherwise specified

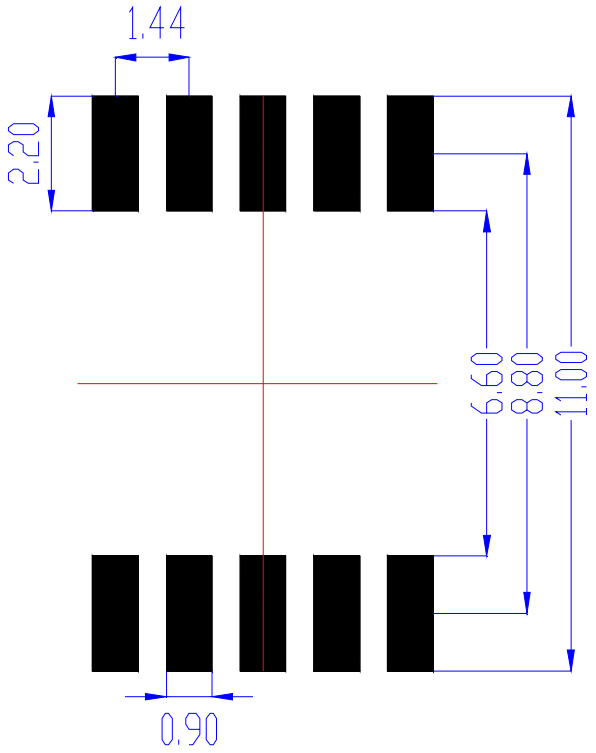
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■ -IR Reflow Temperature / Time :



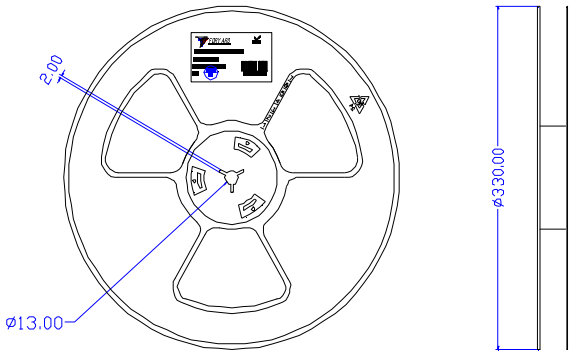
NOTES:
1. We recommend the reflow temperature 245°C(+/−5°C).The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

■ Soldering Pad Size

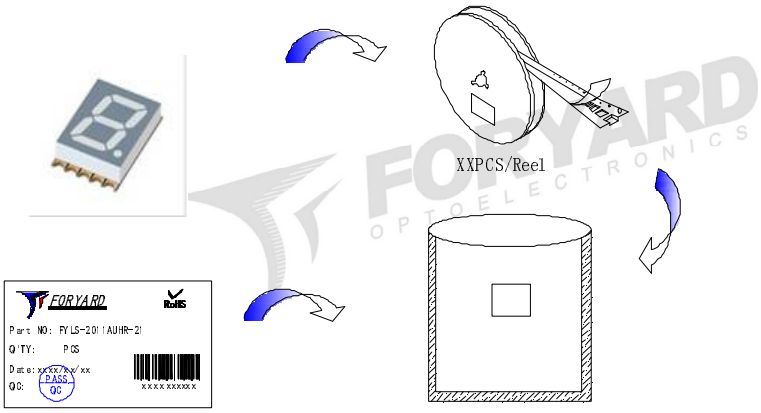


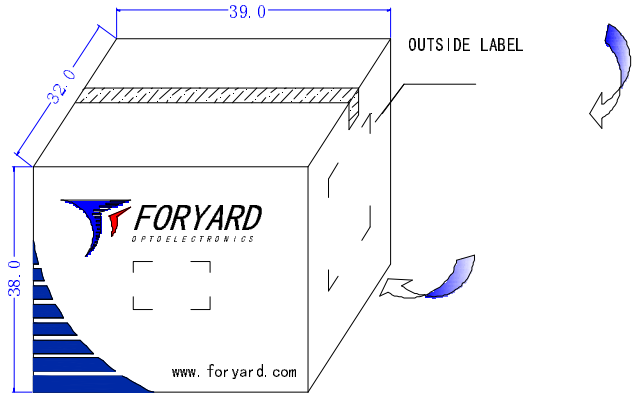
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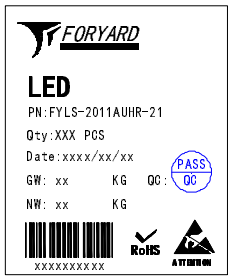
■ Reel Dimensions



■ Packing & Labe Specifications







Note: The specifications are subject to change without notice. Please contact us for updated information.