

PRODUCT SPECIFICATION

Model No.: FYLS-3912BUHR-21

Descriptions & Features:	
■	0.39 Inch (10.00mm) digit height, Single Digit SMD Display
■	Common Anode
■	Emitting Color : Ultra Hi Red
■	Chip Material:AlGaInP
■	Gray Face
■	White Diffused Segment



CUSTOMER APPROVED SIGNATURES	APPROVED BY	SALES BY	PREPARED BY
			

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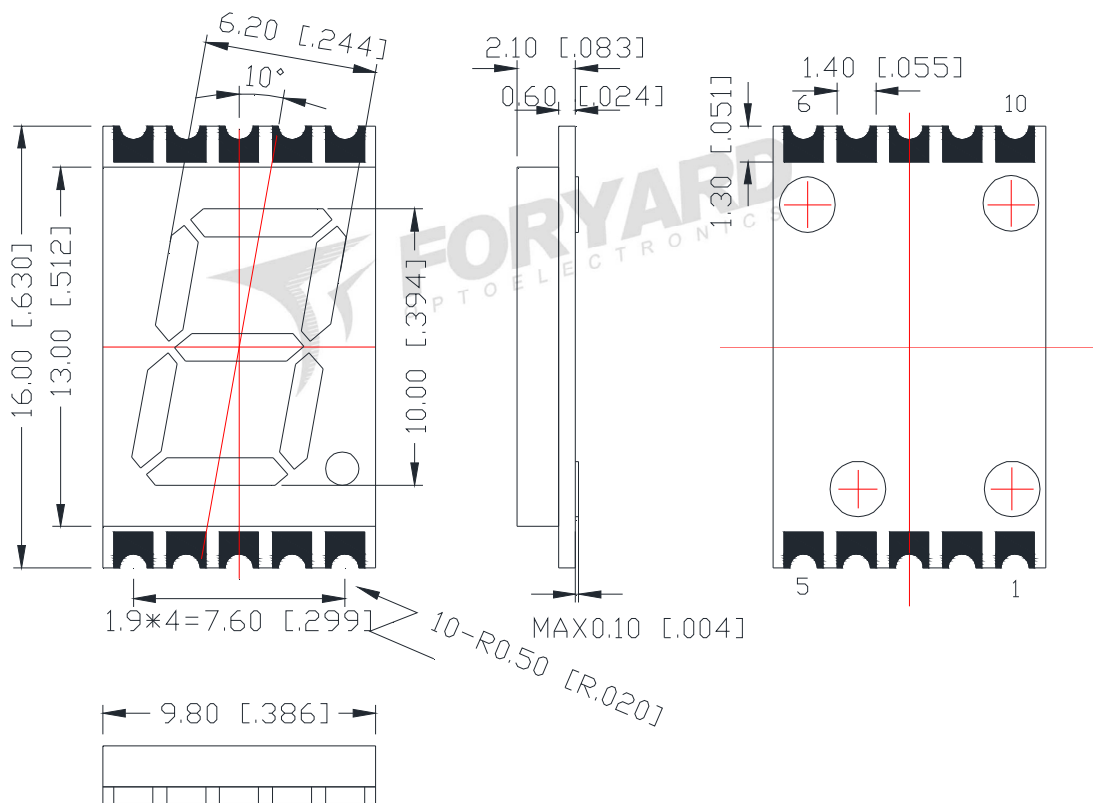
[Http://www.foryard.com](http://www.foryard.com)

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■ Features -

1. 0.39 inch (10.00mm) digit height.
2. RoHS compliant.
3. Low current operation.
4. Low power consumption.
5. Easy mounting on P.C. board.

■ Mechanical Dimensions

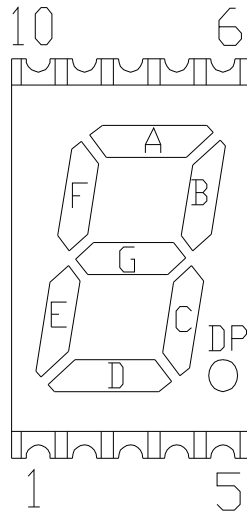


Notes:

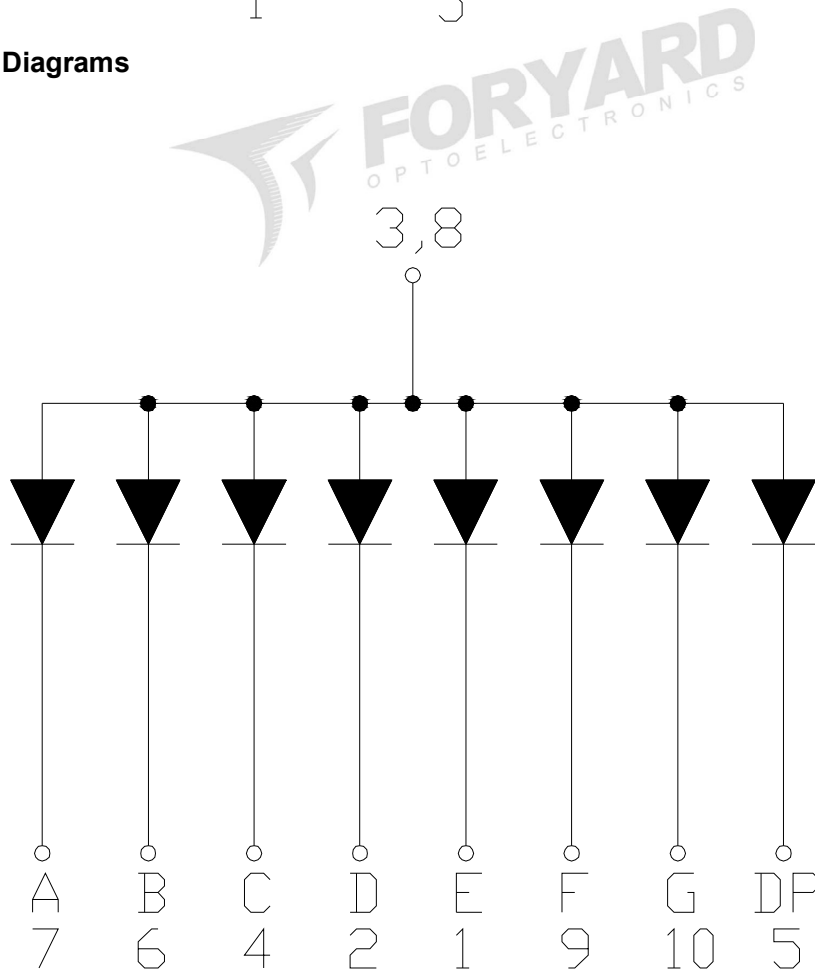
1. All dimensions are in millimeters (inches)
2. Dimension in millimeter [inch], tolerance is ± 0.25 [0.010] and angle is $\pm 1^\circ$ unless otherwise noted.
3. Bending $\leq$ Length*1%.
4. The specifications, characteristics and technical data described in the datasheet are subject to change without 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	—	—	75	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=20mA)

(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:
					Typ	Max	
UHR	Ultra Hi Red	AlGaInP	640nm	20nm	1.80	2.50	30-60
Segment-to-Segment Luminous Intensity ratio(Iv-M)					1.5:1		

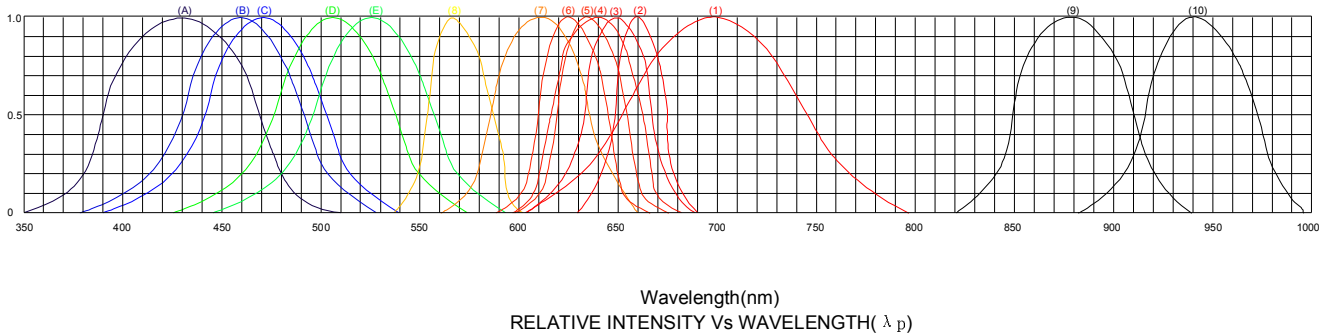
Note:

- 1.Luminous Intensity is based on the Foryard standards.
- 2.Pay attention about static for InGaN

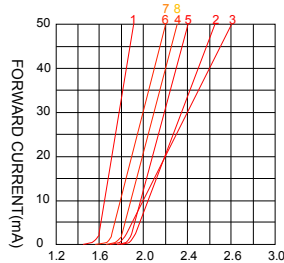
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Typical Electrical / Optical Characteristics Curves

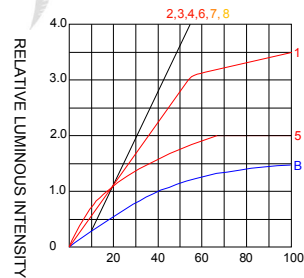
(Ta = 25°C Unless Otherwise Noted)



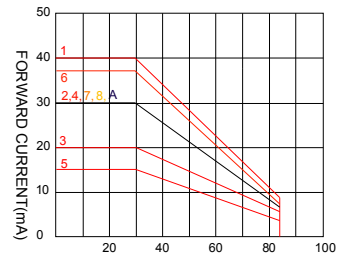
- | | |
|--------------------------------|------------------------------------|
| (1)-GaP 700nm/Red | (9)-GaAlAs 880nm |
| (2)-AlGaAs/SH 660nm/Hi Red | (10)-GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3)-AlGaAs/DH 650nm/Super Red | (A)-GaN/SiC 430nm/Blue |
| (4)-AlGaInP/640nm/Ultra Hi Red | (B)-InGaN/SiC 460nm/Blue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



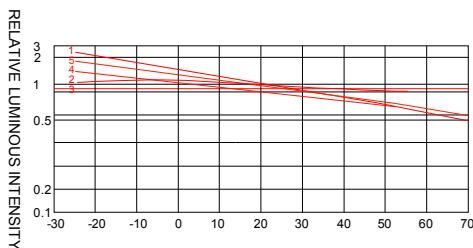
FORWARD VOLTAGE(Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



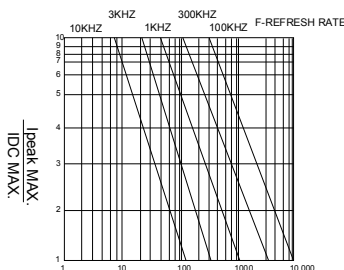
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS FORWARD
CURRENT



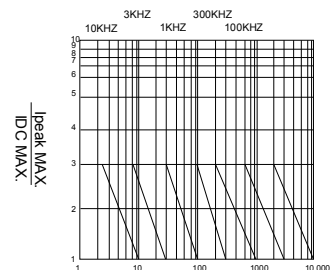
AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE
Ta(°C)



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

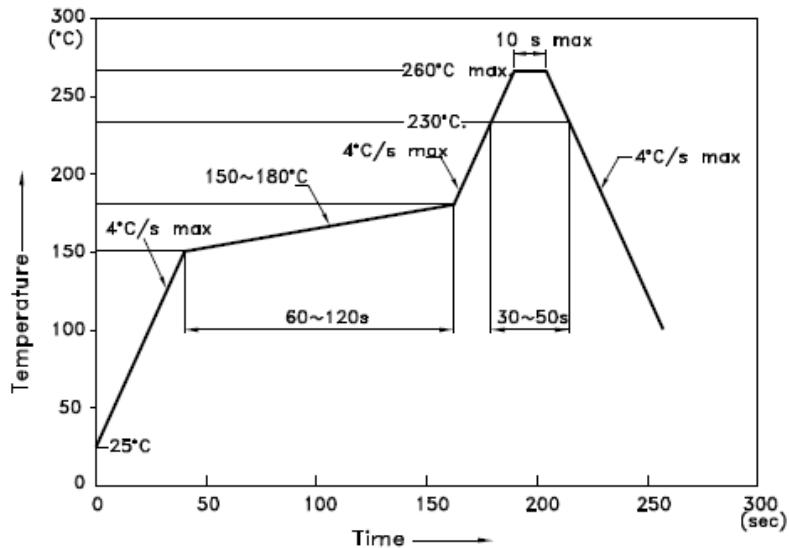


tp-PULSE DURATION μs
(5)

NOTE: 25°C free air temperature unless otherwise specified

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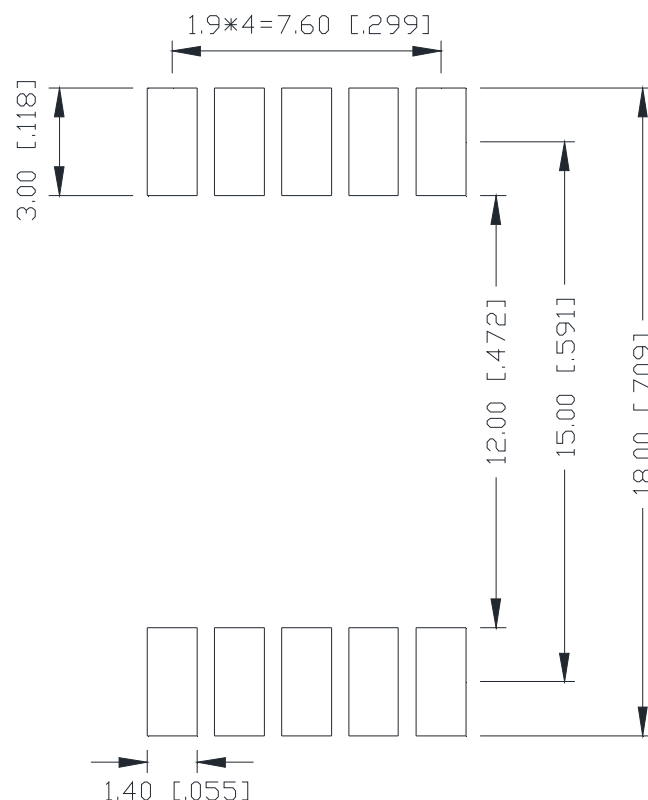
■ IR Reflow Temperature / Time :



NOTES:

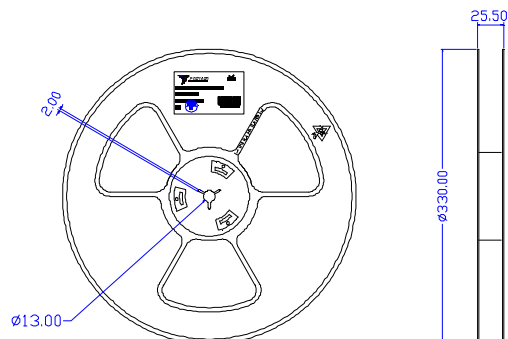
1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

■ Soldering Pad Size

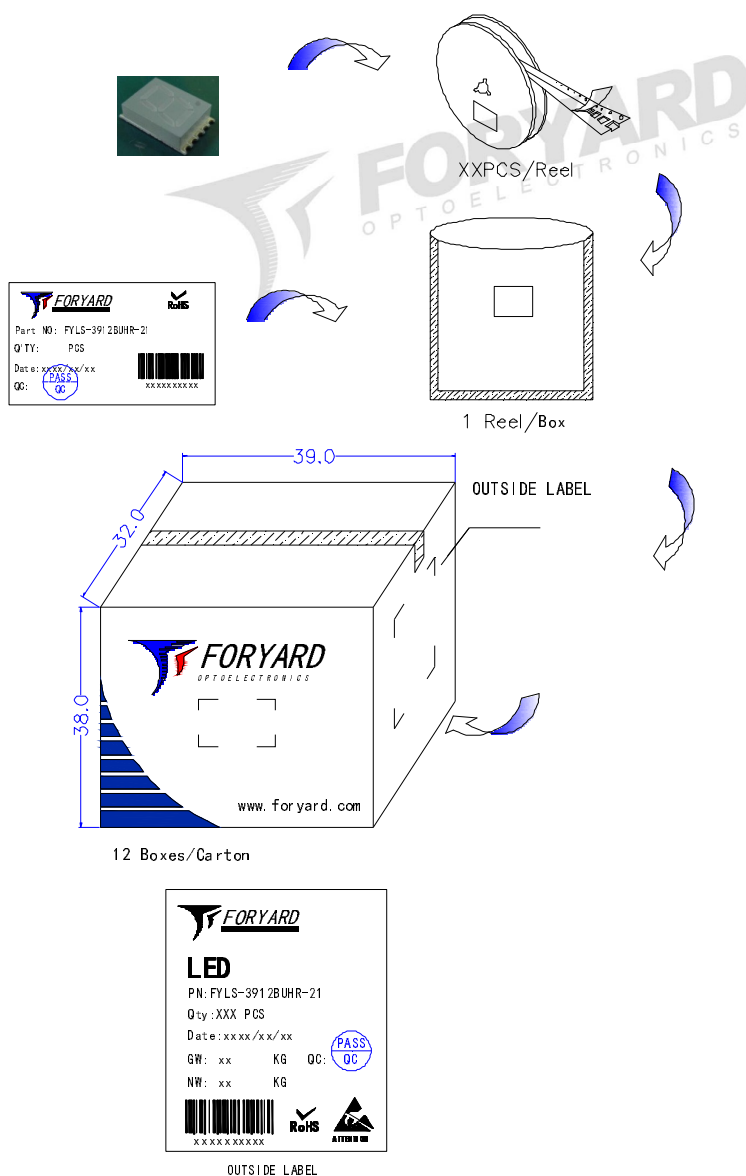


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■ Reel Dimensions



■ Packing & Label Specifications



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