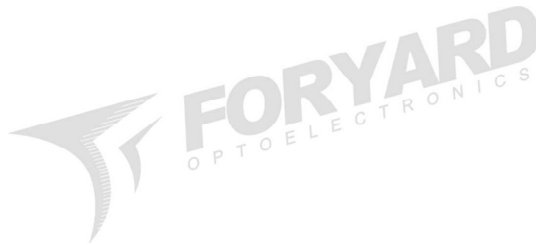


PRODUCT SPECIFICATION

Model No.: FYLS-4012A/BX-XX

Descriptions & Features:
<ul style="list-style-type: none"> ■ 0.39 Inch (10.00mm) digit height, Single Digit SMD Display ■ Case mold type. ■ RoHS compliant. ■ Low current operation ■ Low power consumption. ■ Easy mounting on P.C. board or socket.



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

NINGBO FORYARD OPTOELECTRONICS CO.,LTD.

Add:NO.666 Jinghua Road, Hi-tech Park, Ningbo, Zhejiang, China

Zip:315103

Tel: 0086-574-87933652 87922206 87927870

Fax: 0086-574-87927917

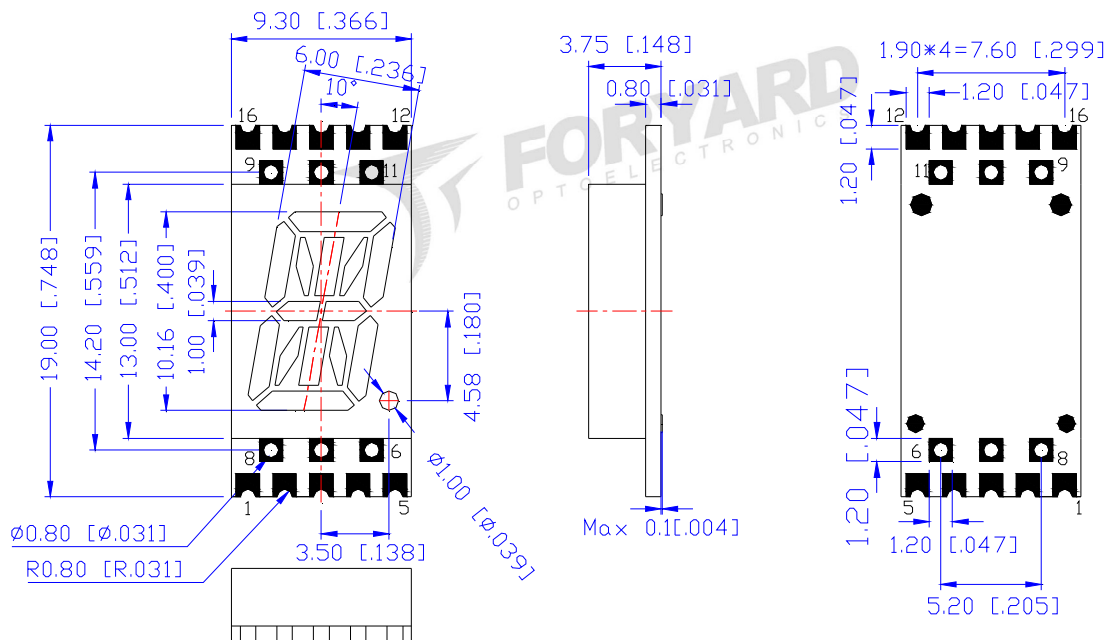
E-mail:Sales@foryard.com (General)

Model No.: FYLS-4012A/BX-XX

■ -XX: REF Surface / Epoxy color

Color \ Number	0	1	2	3	4
REF Surface Color	<input type="radio"/> White	<input type="radio"/> Black	<input type="radio"/> Gray	<input type="radio"/> Red	<input type="radio"/> Green
Epoxy Color	<input type="radio"/> Water Clear	<input type="radio"/> White	<input type="radio"/> Red	<input type="radio"/> Green	<input type="radio"/> Yellow

■ Mechanical Dimensions

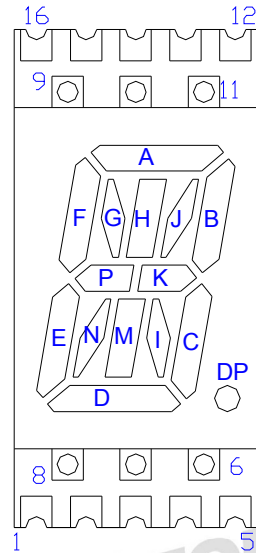


Notes:

- All dimensions are in millimeters (inches)
- Dimension in millimeter [inch], tolerance is ± 0.25 [0.010] and angle is $\pm 1^\circ$ unless otherwise noted.
- Bending \leq Length*1%.
- The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
- The drawing is different from the actual one, please refer to the sample.

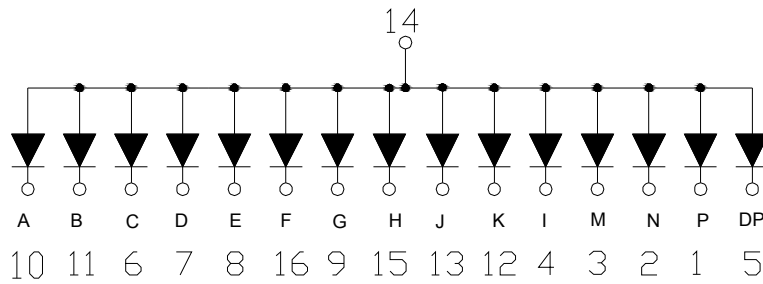
Model No.: FYLS-4012A/BX-XX

■ All Light On Segments Feature & Pad Position

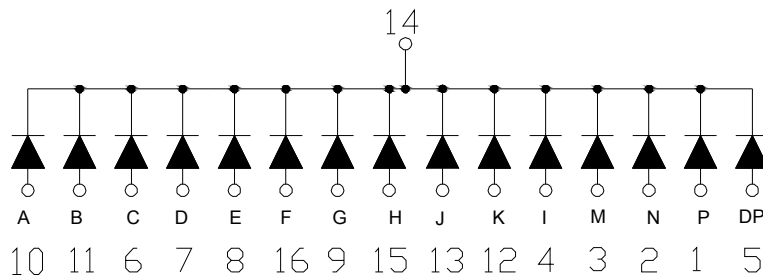


■ Internal Circuit Diagrams

FYLS-4012Ax



FYLS-4012Bx



Model No.: FYLS-4012A/BX-XX
■ Absolute maximum ratings

(Ta=25°C)

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	°C
Storage Temperature	Tstr	—	-40	+85	°C

■ Electrical-Optical Characteristics
● Color Code & Chip Characteristics:(Test Condition:IF=10mA)

(Ta=25°C)

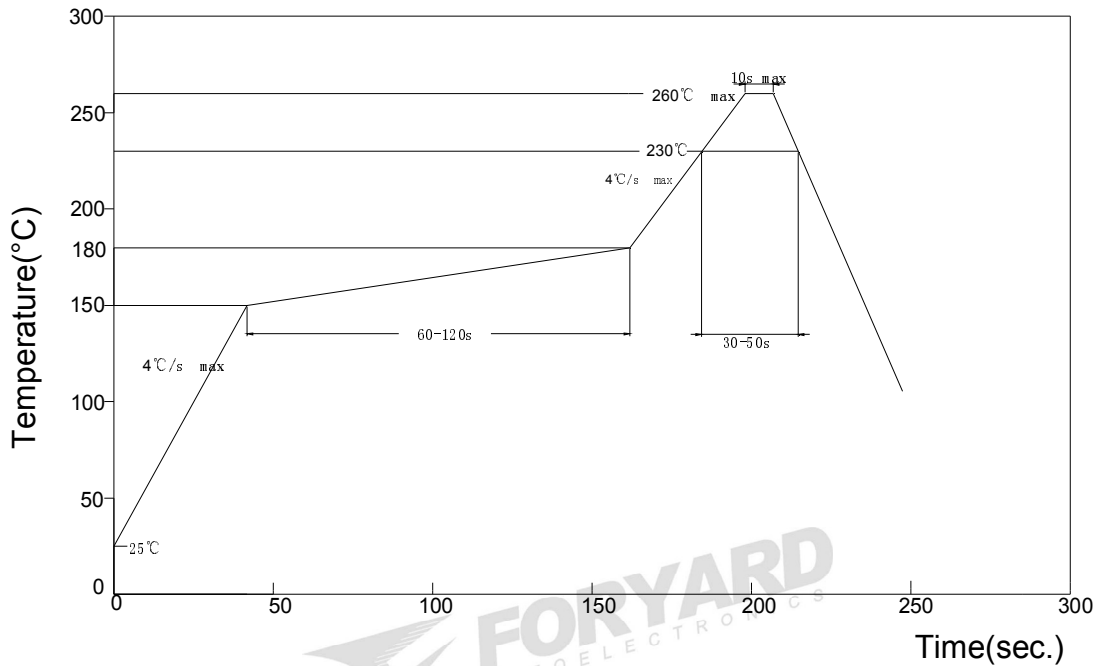
Emitting Color	Dice Material	Peak Wave Length(λ_p)	Spectral Line halfwidth ($\Delta\lambda_{1/2}$)	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd	
				Typ	Max		
Standard brightness							
S	Hi Red	AlGaInP	660nm	20nm	2.00	2.50	10~20
D	Super Red	AlGaAs/DH	650nm	20nm	2.00	2.50	15~30
E	Orange	GaAsP	625nm	35nm	2.00	2.50	10~21
A	Amber	GaAsP	610nm	35nm	2.00	2.50	10~20
Y	Yellow	GaAsP	590nm	35nm	2.00	2.50	10~20
G	Yellow Green	AlGaInP	570nm	10nm	2.00	2.50	10~20
B	Blue	InGaN	460nm	60nm	3.00	3.80	9~20(mw)
			470nm		3.00	3.80	9~20(mw)
W	White	InGaN/GaN	X=0.29,Y=0.30	CCT:9500K	3.00	3.80	60~120~180
Ultra brightness							
UHR	Ultra Hi Red	AlGaInP	640nm	20nm	2.00	2.50	20~50
UR	Ultra Red	AlGaInP	635nm	20nm	2.00	2.50	40~70
UE	Ultra Orange	AlGaInP	625nm	20nm	2.00	2.50	40~85
UA	Ultra Amber	AlGaInP	610nm	20nm	2.00	2.50	30~105
UY	Ultra Yellow	AlGaInP	590nm	20nm	2.00	2.50	30~135
UG	Ultra Yellow Green	AlGaInP	570nm	30nm	2.00	2.50	20~60
PG	Pure Green	InGaN	520nm	36nm	3.00	3.80	350~450
UB	Ultra Blue	InGaN/GaN	460nm	30nm	3.00	3.80	120~180
		InGaN/GaN	470nm	30nm	3.00	3.80	120~180
UW	Ultra White	InGaN/GaN	X=0.29,Y=0.30	CCT:9500K	3.00	3.80	280~600
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

Model No.: FYLS-4012A/BX-XX

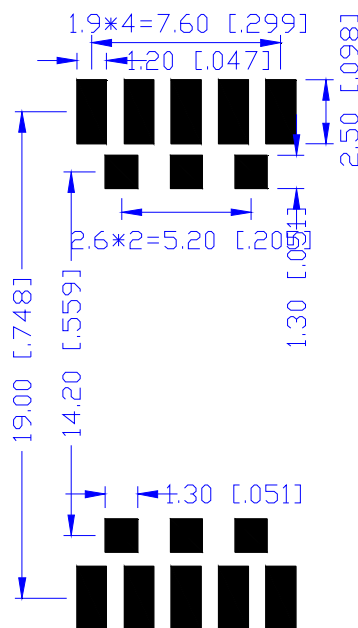
IR Reflow Temperature / Time :



NOTES:

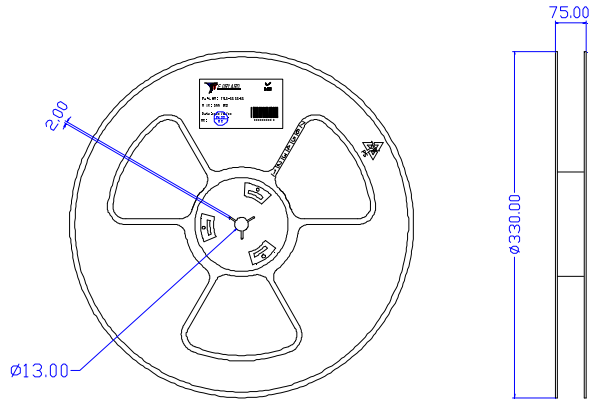
1. We recommend the reflow temperature 245°C (+/-5°C) . The maximum soldering temperature should be limited to 260°C .
2. Don't cause stress to the epoxy resin while it is exposed to high temperature .
3. Number of reflow process shall be 2 times or less .

Soldering Pad Size

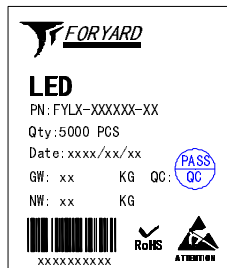
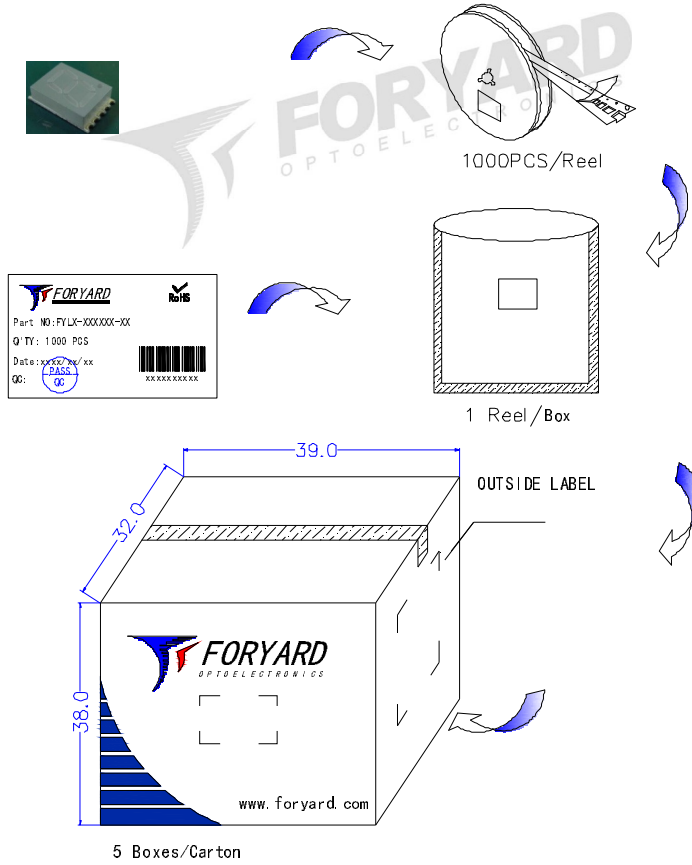


Model No.: FYLS-4012A/BX-XX

■ Reel Dimensions



■ Packing & Label Specifications



OUTSIDE LABEL

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