

Model No.	FYD-2822BUG-XX
Rev.	Α

# PRODUCT SPECIFICATION

Model No.: FYD-2822BUG-XX

### **Descriptions:**

- ■0.28 Inch Double Digits Display
- Common Anode
- ■Emitting Color: Ultra Green
- ■Chip Material:AlGaInP









CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

#### NINGBO FORYARD OPTOELECTRONICS CO.,LTD

**Add:**NO.115 Qixin Road Ningbo Zhejiang China **Tel:** 0086-574-87933652 87927870 87922206

Fax: 0086-574-87927917

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

Http://www.forvard.com

Http://www.foryard.com

**Zip:**315042

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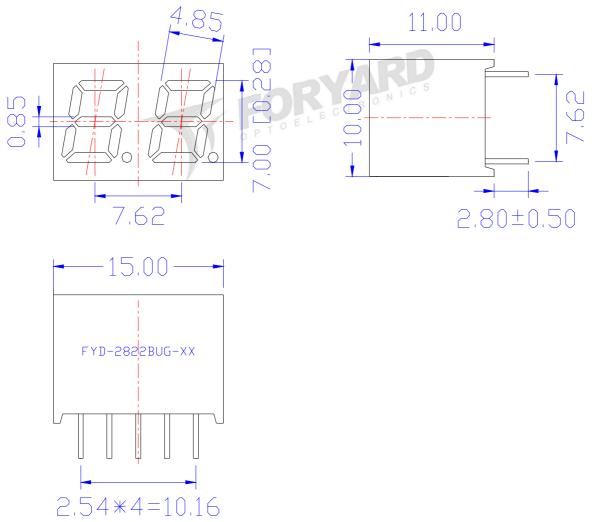
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#### Model No.: FYD-2822BUG-XX Color **Numbe** 0 2 3 4 1 **REF Surface Color** White ○ Black ○ Gray ○ Red O Green **Epoxy Color** ○ Water Clea ○ White ○ Red Green Yellow

#### Features -

- 1. 0.28 inch (7.00mm) digit height.
- 2. Case mold type.
- 3. RoHS compliant.
- 4. Low current operation
- 5. Low power consumption.
- 6. Easy mounting on P.C. board or socket.

#### Mechanical Dimensions -



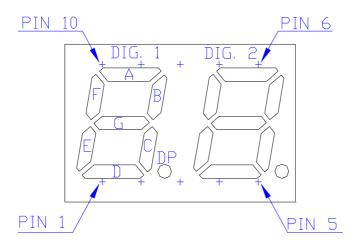
#### Notes:

- 1. All pins are Φ0.45[.018]mm
- 2. Dimension in millimeter [inch], tolerance is  $\pm 0.25$  [.010] and angle is  $\pm 1^{\circ}$  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.

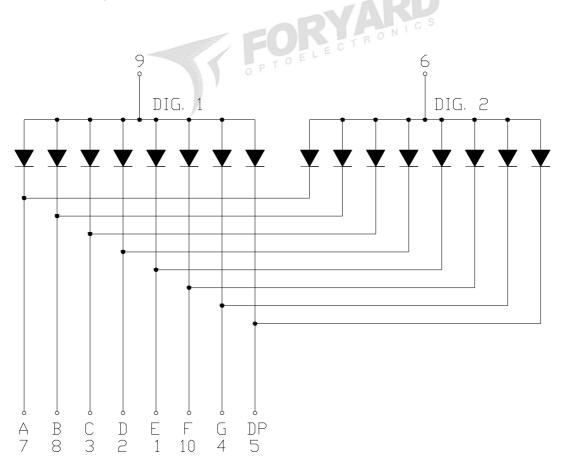


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### ■ All Light On Segments Feature & Pin Position



### ■ Internal Circuit Diagrams -



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### ■ Absolute maximum ratings

(Ta=25℃)

Parameter	Symbol	Test Condition	Value		Unit	
Farameter	Syllibol	rest Condition	Min	Max	Offic	
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	$^{\circ}$	
Storage Temperature	Tstr	_	-40	+85	$^{\circ}$	

### **■** Electrical-Optical Characteristics

• Color Code & Chip Characteristics:(Test Condition:IF=20mA)

(Ta=25℃)

En	nitting Color	Dice Material	Peak Wave Length(λ <sub>P</sub> )	Spectral Line halfwidt	Forv Voltaç Uni	je(VF)	Luminous Intensity (Iv)
				h(Δλ1/2)	Тур	Max	Unit:mcd
UG	Ultra Green	AlGalnP	570nm	30nm	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

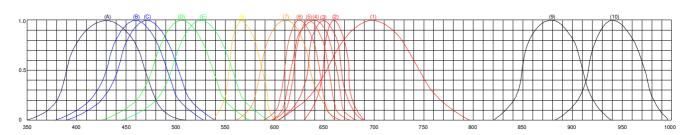
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#### **■** Typical Electrical / Optical Characteristics Curves

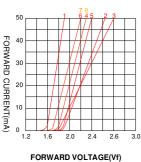
(Ta = 25℃ Unless Otherwise Noted)



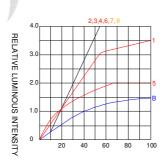
## $Wavelength(nm) \\ RELATIVE INTENSITY Vs WAVELENGTH( \ \lambda \ p) \\$

- (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)-GaAIP/AIGaInP/625nm/Orange
- (7)-GaAsP/AlGaInP 610nm/Amber
- (8)-GaP 570nm/Yellow Green

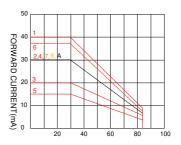
- (9)-GaAlAs 880mm
- (10)-GaAs/GaAs & GaAlAs/GaAs 940nm
- (A)-GaN/SiC 430nm/Blue
- (B)-InGaN/SiC 460nm/Blue
- (C)-InGaN/SiC 470nm/Blue
- (D)-InGaN/SiC 505nm/Ultra Green
- (E)-InGaN/SiC 525nm/Ultra Green



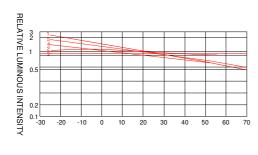
FORWARD CURRENT VS. FORWARD VOLTAGE



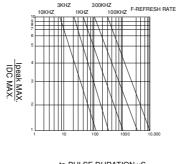
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS FORWARD
CURRENT



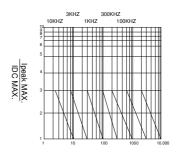
AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE  $Ta(^{\circ}C)$ 



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

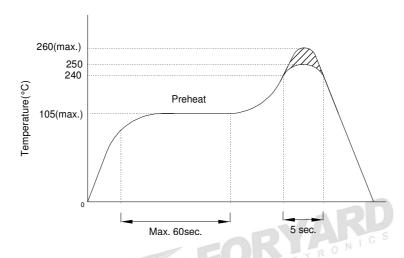
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#### ■ Precautions For Use -

#### 1. Recommended Soldering conditions-Wave Soldering



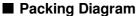
#### 2. Soldering Iron

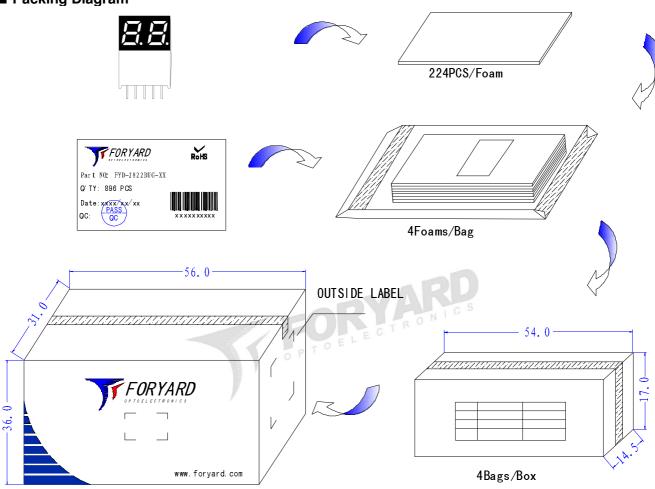
Basic SPEC. is  $\leq$ 5sec. When 260°C. If temperature is higher, time should be shorter (+10°C $\rightarrow$ -1sec.). Power dissipation of iron should be smaller than 15W,and temperature should be controllable. Surface temperature of the device should be under 230°C.



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4Boxes/Carton





FORYARD

PN: FYD-2822BUG-XX
Qty: 14336 PCS
Date: xxxx/xx/xx
GW: 19.00 KG QC: QC
NW: 17.00 KG

OUTSIDE LABEL

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

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### ■ 修改记录

日期	修改内容	工程师	版本
2016-9-16	新增	王宏波	Α
	-/ARD		
	TO S		
	PTOELECTRON		
	7		