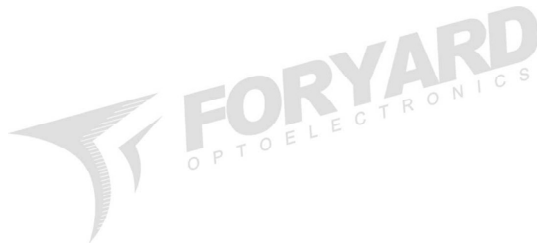


PRODUCT SPECIFICATION

Model No.: FYLD-2821A/BX-XX

| Descriptions & Features: |
|--|
| <ul style="list-style-type: none"> ■ 0.28 Inch (5.08mm) digit height, Double 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.

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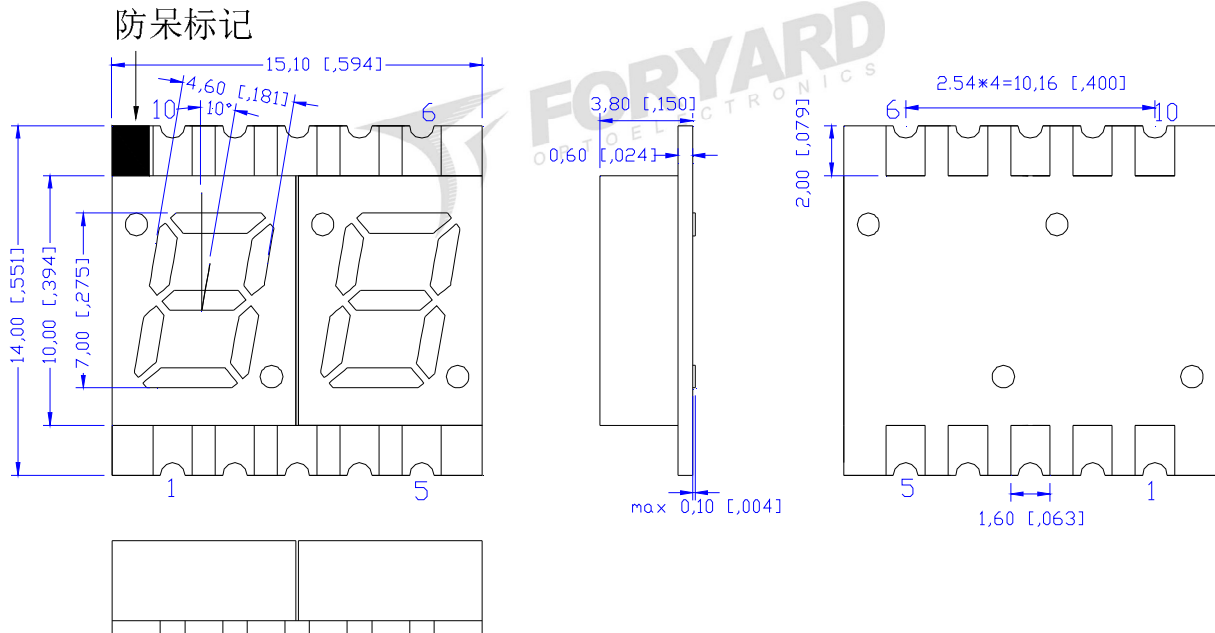
E-mail:Sales@foryard.com (General)

Model No.: FYLD-2821A/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

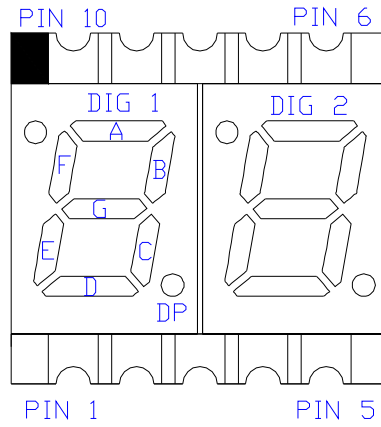


Notes:

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.
5. The drawing is different from the actual one, please refer to the sample.

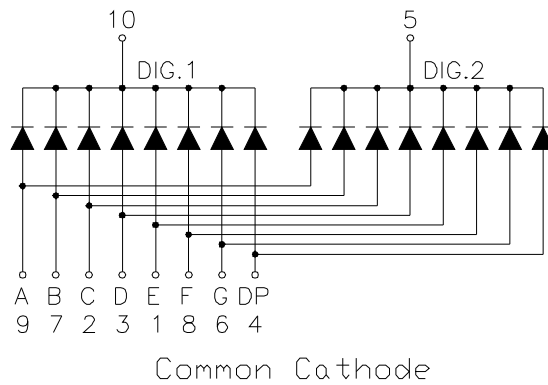
Model No.: FYLD-2821A/BX-XX

■ All Light On Segments Feature & Pad Position

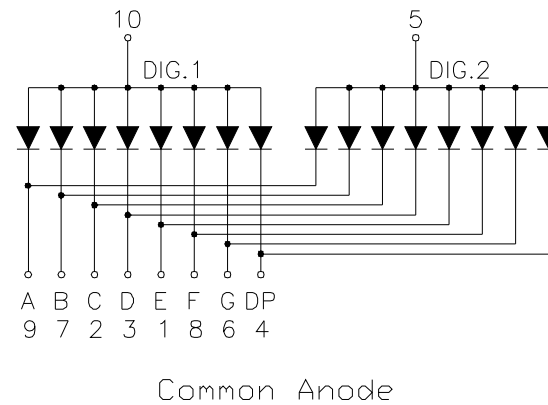


■ Internal Circuit Diagrams

FYLD-2821AX



FYLD-2821BX



Model No.: FYLD-2821A/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)

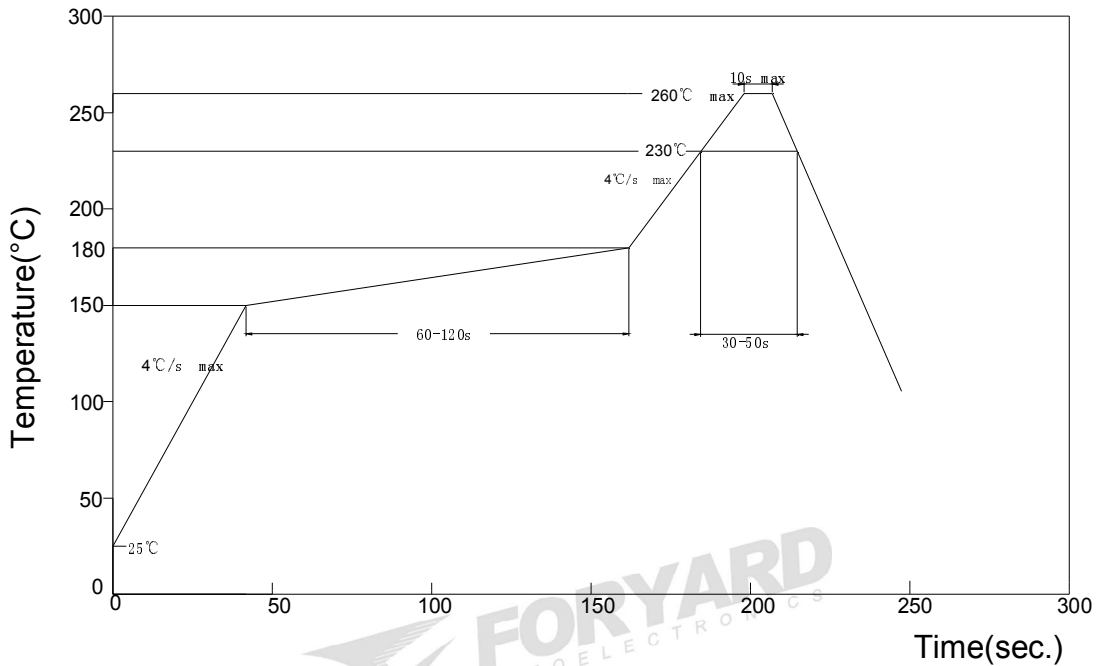
| Emitting Color | Dice Material | Peak Wave Length(λ_p) | Spectral Line halfwidth ($\Delta\lambda_{1/2}$) | Forward Voltage(VF) Unit:V | | Luminous Intensity (Iv) Unit:mcd | |
|---|--------------------|---------------------------------|---|----------------------------|------|----------------------------------|------------|
| | | | | 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.: FYLD-2821A/BX-XX

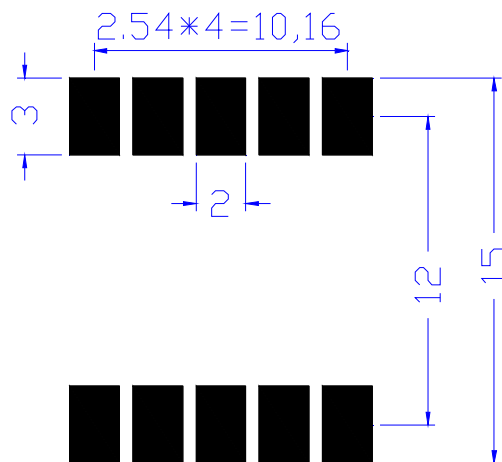
IR Reflow Temperature / Time :



NOTES:

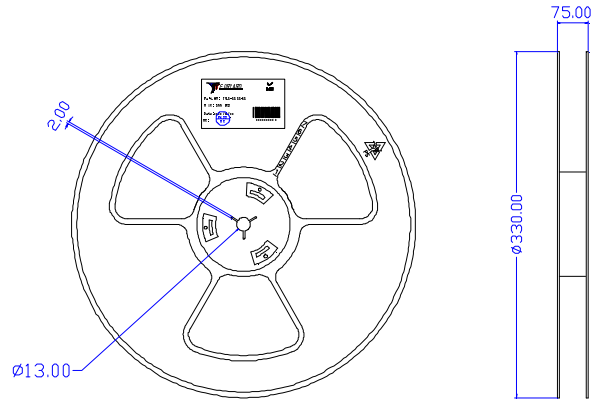
1. We recommend the reflow temperature 245°C (+/-5°C) . The maximum soldering temperature should be limited to 260°C .
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Soldering Pad Size

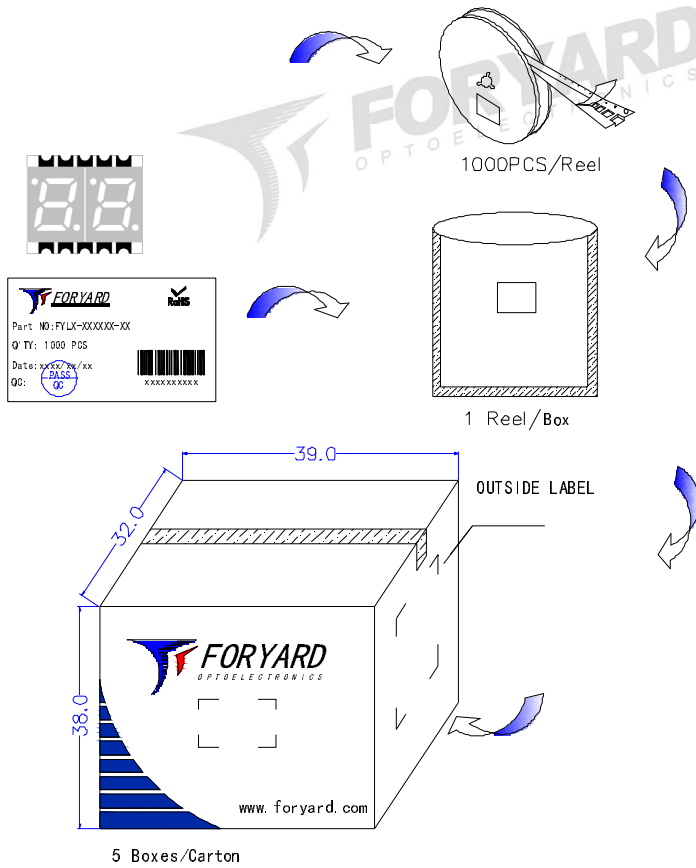


Model No.: FYLD-2821A/BX-XX

■ Reel Dimensions



■ Packing & Label Specifications



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