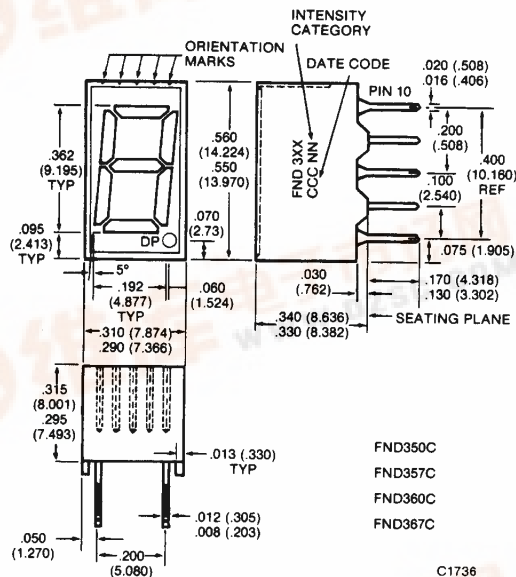




## 0.362-INCH SEVEN SEGMENT DISPLAYS

**RED FND350C FND357C FND358C**  
**HI-BRITE RED FND360C FND367C FND368C**

## PACKAGE DIMENSIONS

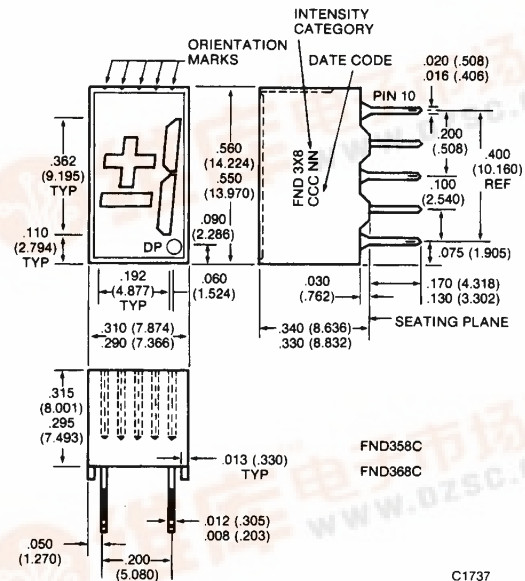


NOTES:

1. ALL DIMENSIONS ARE IN MM (INCH)  
2. TOLERANCES ARE  $\pm 0.010$  INCH  
UNLESS OTHERWISE SPECIFIED

## DESCRIPTION

The FND35XC are red GaAsP/GaAs displays and FND36XC are hi-brite GaP/GaP displays. Both series are of nominal size of 0.362" in digit height and are of right hand decimal configuration.



## FEATURES

- Exactly pin and package compatible with FND3XX.
- Compact—10 digits in 3 inch panel width
- Right hand decimal configuration
- Wide viewing angle
- Categorized for luminous intensity
- Rugged encapsulated plastic construction

## MODEL NUMBERS

| PART NUMBER | COLOR        | DESCRIPTION                             |
|-------------|--------------|-----------------------------------------|
| FND350C     | Red          | Common anode seven segment display      |
| FND357C     | Red          | Common cathode seven segment display    |
| FND358C     | Red          | Common cathode $\pm 1$ overflow display |
| FND360C     | Hi-brite Red | Common anode seven segment display      |
| FND367C     | Hi-brite Red | Common cathode seven segment display    |
| FND368C     | Hi-brite Red | Common cathode $\pm 1$ overflow display |



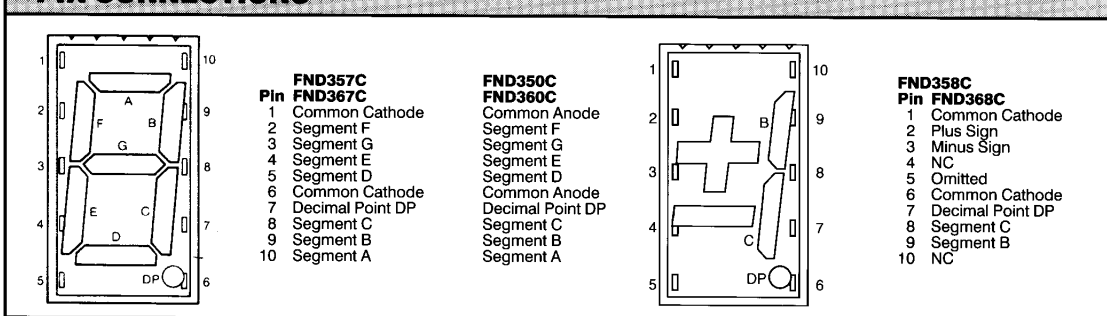
### ABSOLUTE MAXIMUM RATINGS

|                                                               | FND350C<br>FND357C | FND358C       | FND360C<br>FND367C | FND368C |
|---------------------------------------------------------------|--------------------|---------------|--------------------|---------|
| Power dissipation at 25°C ambient                             | 400 mW             | 250 mW        | 320 mW             | 200mW   |
| Continuous forward current                                    |                    |               |                    |         |
| Total                                                         | 200 mA             | 125 mA        | 200 mA             | 125 mA  |
| Per segment or decimal point                                  | 25 mA              | 25 mA         | 25 mA              | 25 mA   |
| Reverse voltage                                               |                    |               |                    |         |
| Per segment or decimal point                                  | 6 V                | 6 V           | 6 V                | 6 V     |
| Storage and operating temperature                             |                    | -25° to +85°C |                    |         |
| Soldering time at 250°C<br>(1/16 inch from the seating plane) |                    | 3 sec         |                    |         |

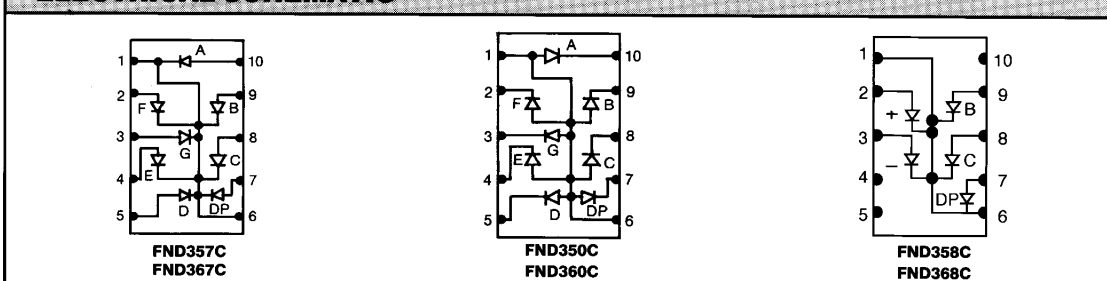
### ELECTRO-OPTICAL CHARACTERISTICS (T<sub>A</sub>=25°C Unless Otherwise Specified)

| Parameter                           | MIN. | TYP. | MAX. | UNITS | TEST CONDITIONS        |
|-------------------------------------|------|------|------|-------|------------------------|
| Forward voltage - V (per diode)     |      |      |      |       |                        |
| FND35XC                             |      | 1.7  | 2.0  | V     | I <sub>F</sub> =20 mA  |
| FND36XC                             |      | 2.1  | 2.6  | V     | I <sub>F</sub> =20 mA  |
| Luminous intensity - I <sub>v</sub> |      |      |      |       |                        |
| FND35XC                             | 240  | 450  |      | ucd   | I <sub>F</sub> =20 mA  |
| FND36XC                             | 240  | 450  |      | ucd   | I <sub>F</sub> =20 mA  |
| Peak wavelength                     |      |      |      |       |                        |
| FND35XC                             |      | 655  |      | nm    | I <sub>F</sub> =20 mA  |
| FND36XC                             |      | 655  |      | nm    | I <sub>F</sub> =20 mA  |
| Reverse voltage - V <sub>R</sub>    | 5    |      |      | V     | I <sub>R</sub> =100 μA |
| Capacitance - C (per diode)         |      | 23   |      | pF    | V=0,<br>F=1 MHz        |

### PIN CONNECTIONS



### ELECTRICAL SCHEMATIC



**TYPICAL ELECTRO - OPTICAL CHARACTERISTIC CURVES**

( $T_A = 25^\circ\text{C}$  Unless Otherwise Specified)

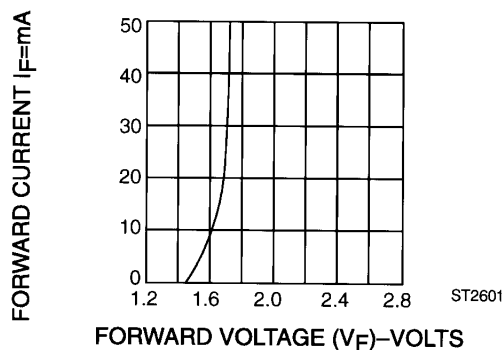


Fig. 1 Forward Current vs. Forward Voltage

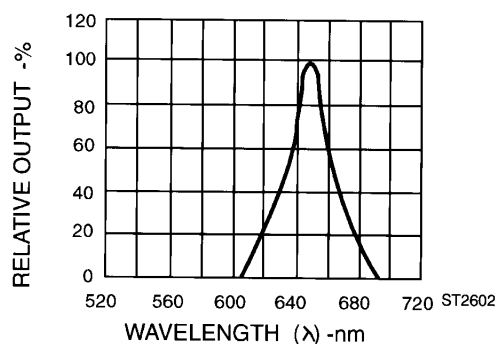


Fig. 2 Spectral Response

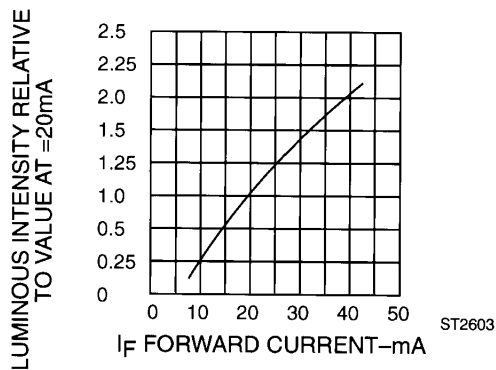


Fig. 3 Relative Luminous Intensity vs. Forward Current

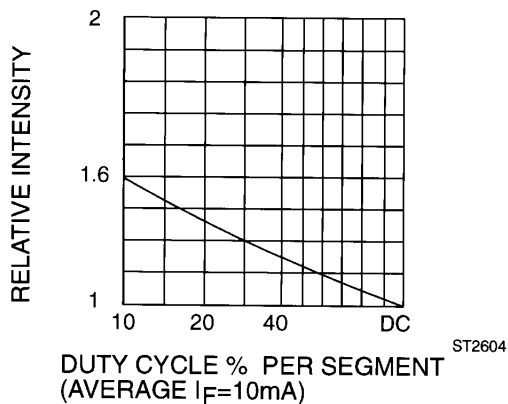


Fig. 5 Luminous Intensity vs. Duty Cycle

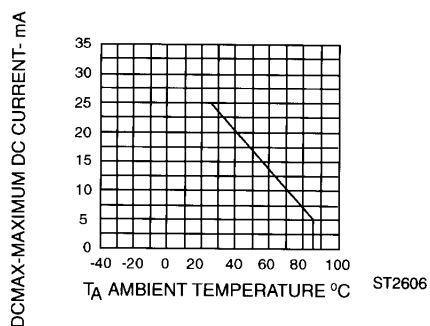


Fig. 4 Maximum Allowable DC Current Per Segment  
vs. A Function Of Ambient Temperature

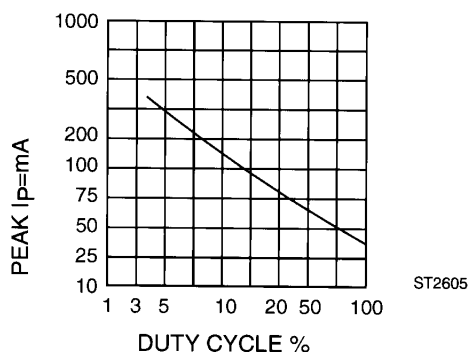


Fig. 6 Max Peak Current vs. Duty Cycle %  
(Refresh Rate  $f = 1 \text{ KHz}$ )

**TYPICAL ELECTRO - OPTICAL CHARACTERISTIC CURVES**

( $T_A = 25^\circ\text{C}$  Unless otherwise specified)

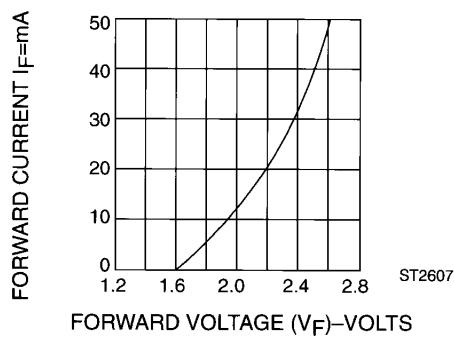


Fig. 1 Forward Current vs. Forward Voltage

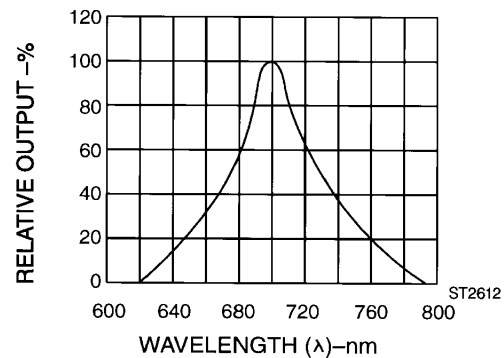


Fig. 2 Spectral Response

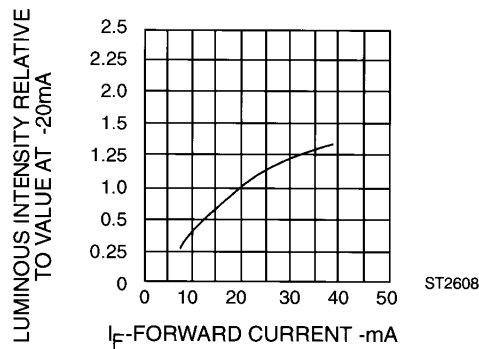


Fig. 3 Relative Luminous Intensity vs. Forward Current

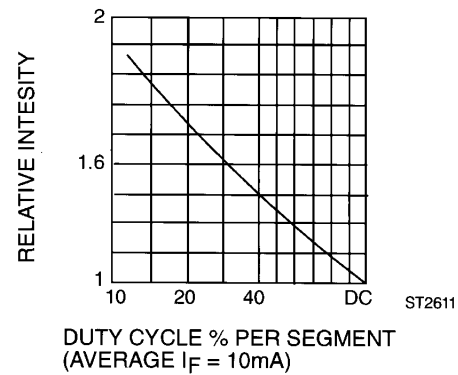


Fig. 5 Luminous Intensity vs. Duty Cycle

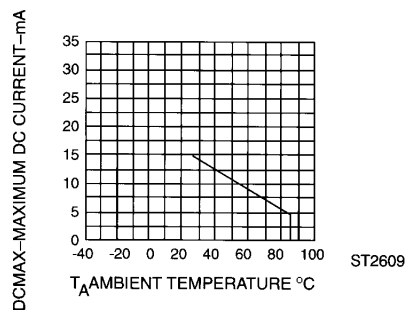


Fig. 4 Maximum Allowable DC Current Per Segment vs. A Function Of Ambient Temperature

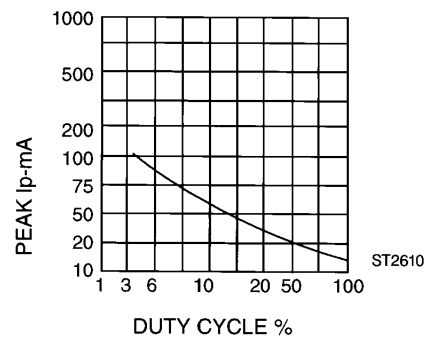


Fig. 6 Max Peak Current vs. Duty Cycle % (Refresh Rate  $f = 1 \text{ KHz}$ )

Clean the displays only in water, isopropanol, ethanol, freon TF or TE (or equivalent)