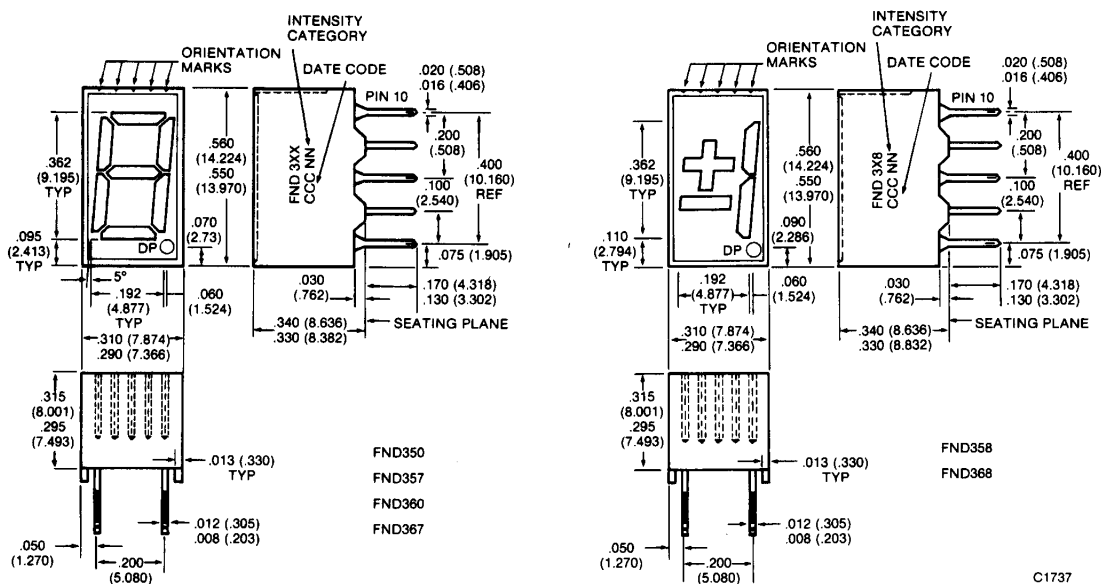


HIGH EFFICIENCY RED FND310C FND317C FND318C

PACKAGE DIMENSIONS



- NOTES:
1. ALL DIMENSIONS ARE IN MM (INCH)
2. TOLERANCE ARE ± 0.010 INCH UNLESS OTHERWISE SPECIFIED

DESCRIPTION

The FND310C, FND317C and FND318D are high efficiency red GaP 7-segment displays with nominal 0.362" digit height. Reflector cap, PCB and encapsulant are used in the construction of these FND3XXCs.

FEATURES

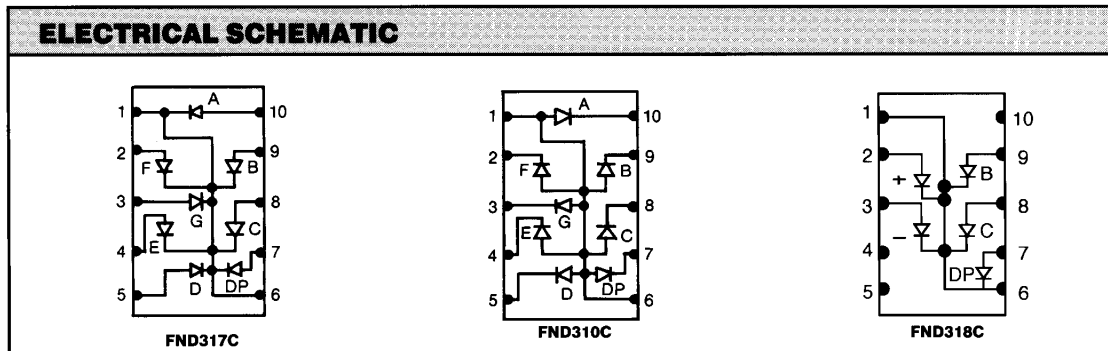
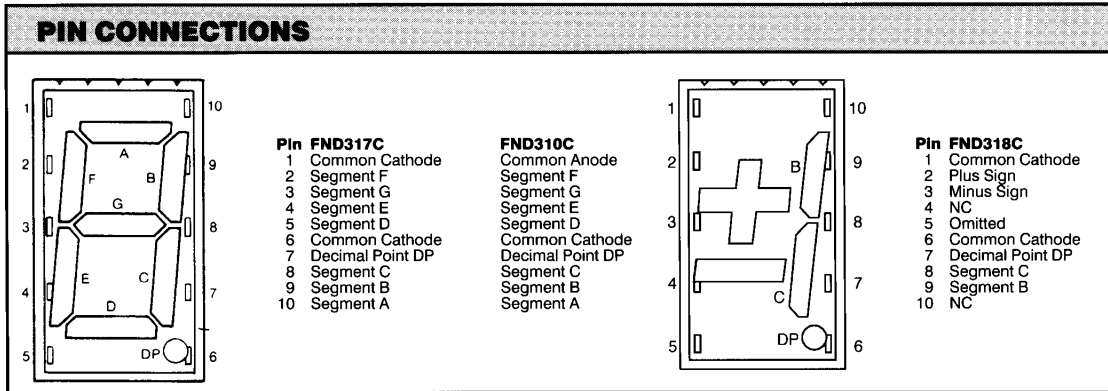
- Exactly pin and package compatible with FND3XX
- Compact — 10 digits in 3-inch panel width
- Wide viewing angle
- Right-hand decimal configuration
- Categorized for luminous intensity
- Rugged encapsulated plastic construction

MODEL NUMBERS

| PART NUMBER | COLOR | DESCRIPTION |
|-------------|--------------|---|
| FND310C | Hi. Eff. Red | Common anode seven segment display |
| FND317C | Hi. Eff. Red | Common cathode seven segment display |
| FND318C | Hi. Eff. Red | Common cathode ± 1 overflow display |

| ABSOLUTE MAXIMUM RATINGS | | |
|--|---------------------|----------------|
| | FND310C/317C | FND318C |
| Power dissipation at 25°C ambient | 500 mW | 320 mW |
| Continuous forward current | | |
| Total | 200 mA | 125 mA |
| Per segment or decimal point | 25 mA | 25 mA |
| Reverse voltage | | |
| Per segment or decimal point | 6 V | 6 V |
| Storage and operating temperature | -25°C to +85°C | -25°C to +85°C |
| Soldering time at 250°C (1/16 inch from the seating plane) ... | 3 sec | 3 sec |

| ELECTRO-OPTICAL CHARACTERISTICS (TA=25°C Unless Otherwise Specified) | | | | | |
|---|-------------|-------------|-------------|-------------|------------------------|
| PARAMETER | MIN. | TYP. | MAX. | UNIT | TEST CONDITIONS |
| Forward voltage - V (per diode) | | 2.0 | 2.5 | V | I _f =20 mA |
| Luminous intensity - I _v | 1800 | 2700 | | μcd | I _f =20 mA |
| Peak wavelength | | 655 | | nm | I _f =20 mA |
| Spectrum radiation bandwidth | | 45 | | nm | I _f =20 mA |
| Reverse voltage-V _r | 5 | | | V | I _r =100 μA |
| Capacitance - C | | 35 | | pF | V=0, F=1 MHz |



TYPICAL ELECTRO - OPTICAL CHARACTERISTIC CURVES

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

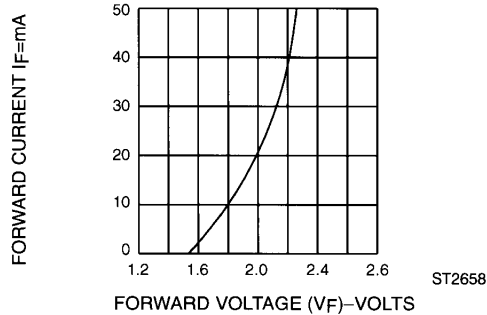


Fig. 1 Forward Current vs. Forward Voltage

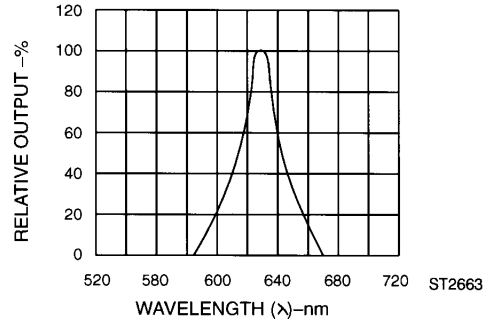


Fig. 2. Spectral Response

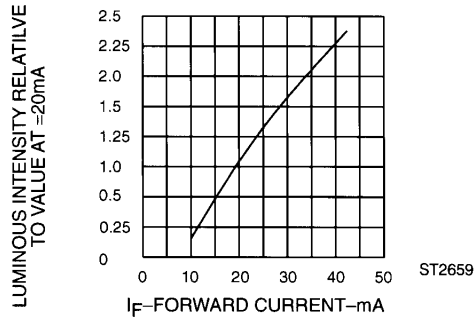


Fig. 3 Relative Luminous Intensity vs. Forward Current

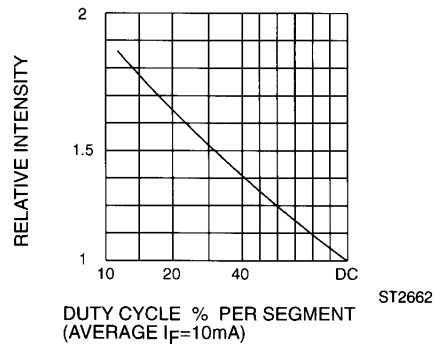


Fig. 5 Luminous Intensity vs. Duty Cycle

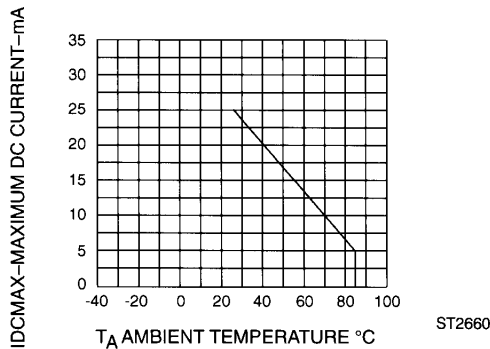


Fig. 4 Maximum Allowable DC Current Per Segment vs. a Function of Ambient Temperature

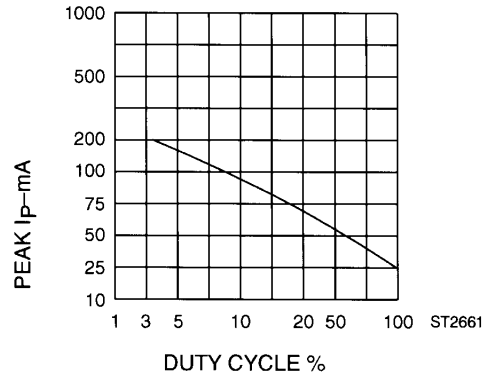


Fig. 6 Max Peak Current vs. Duty Cycle % (Refresh Rate $f = 1\text{KHz}$)

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



0.362-INCH 7-SEGMENT DISPLAY

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.