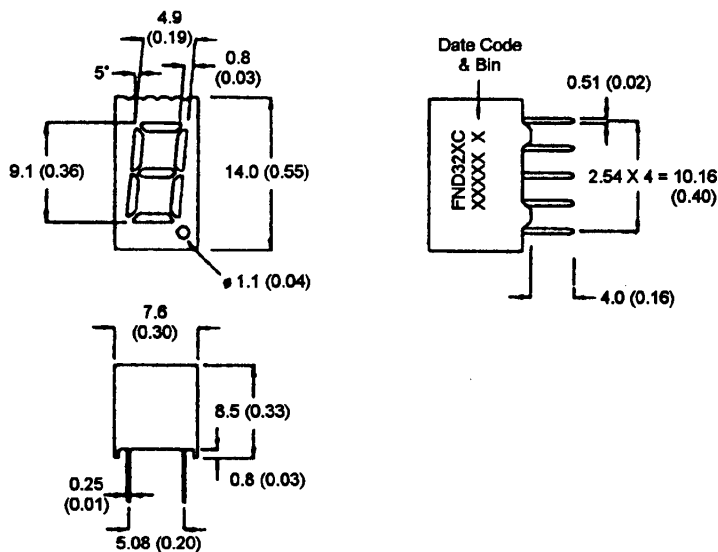


**S/H AlGaAs Red FND320C, FND327C, and FND328C  
(UP-GRADE FOR THE FND35XC and FND36XC)**

**PACKAGE DIMENSIONS**



**FEATURES**

- Easy to read digits.
- Common anode or cathode.
- Low power consumption.
- Bold segments that are highly visible.
- High brightness with high contrast
- White segments on a grey face.
- Directly compatible with integrated circuits.
- Rugged plastic/epoxy construction.

**APPLICATIONS**

- Digital readout displays.
- Instrument panels.

NOTES: Dimensions are in mm (inch).  
All pins are 0.5 (0.02) diameter  
Tolerances are ± 0.25 (0.1) unless otherwise noted.

**MODEL NUMBERS**

<u>Part number</u>	<u>Color</u>	<u>Description</u>
FND320C	S/H AlGaAs Red	1 Digit, Common Anode, Rt. Hand Decimal
FND327C	S/H AlGaAs Red	1 Digit, Common Cathode, Rt Hand Decimal.
FND328C	S/H AlGaAs Red	Overflow, Common Cathode, Rt Hand Decimal.

(For other color options, contact your local area Sales Office)

**ABSOLUTE MAXIMUM RATING** ( $T_A=25^\circ\text{C}$  unless otherwise specified)**AlGaAs Red  
FND32XC**

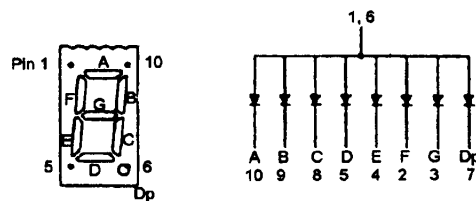
Part number		Units
Continuous forward current ( $I_f$ )		
Per Segment.....	30	mA
Peak forward current per die ( $I_f$ ).....	200	mA
(at $f = 10.0$ KHz, Duty factor = 1/10)		
Power dissipation ( $P_D$ ).....	100*	mW
*Derate Linearly from $25^\circ\text{C}$ .....	0.50	mW/ $^\circ\text{C}$
Reverse voltage per dice.....		5V
Operating and Storage temperature range.....		$-20^\circ\text{C}$ to $+80^\circ\text{C}$
Lead soldering time (at 1/16 inch from the bottom of lamp).....		5 seconds @ $230^\circ\text{C}$

**ELECTRO - OPTICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise specified)**AlGaAs Red  
FND  
32XC**

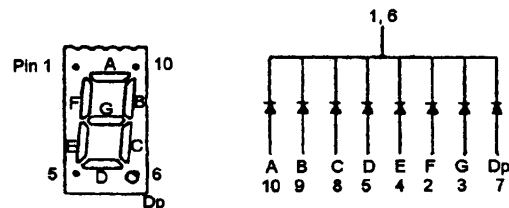
Part number		Test Condition
Luminous intensity (ucd)		
minimum	1500	$I_f = 20$ mA
typical	3000	$I_f = 20$ mA
Forward voltage ( $V_f$ )		
typical	1.8	$I_f = 20$ mA
maximum	2.5	$I_f = 20$ mA
Peak wavelength (nm)	660	$I_f = 20$ mA
Spectral line half width (nm)	30	$I_f = 20$ mA
Reverse breakdown voltage ( $V_R$ )	5	$I_R = 100$ $\mu\text{A}$

**PINOUT**

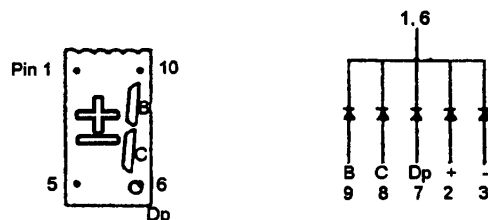
**FND320C - Common Anode**



**FND327C - Common Cathode**



**FND328C - Overflow, Common Cathode**



**GRAPHICAL DETAIL: AlGaAs Red ( $T_A = 25^\circ\text{C}$  unless otherwise specified)**

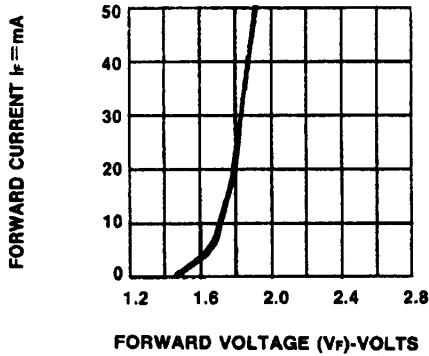


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

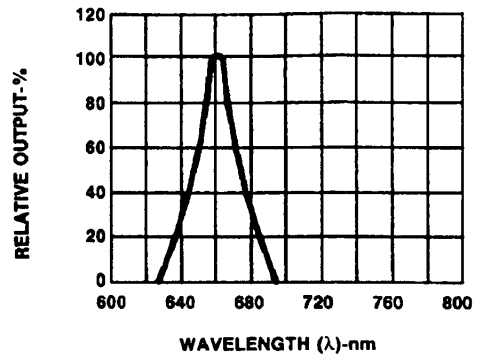


Fig.2 SPECTRAL RESPONSE

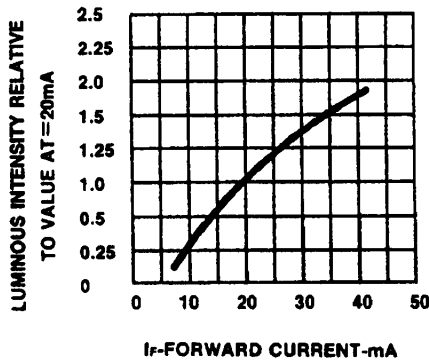


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

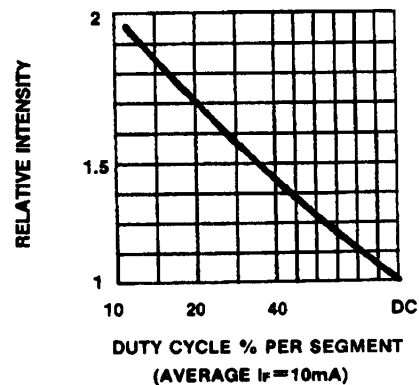


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

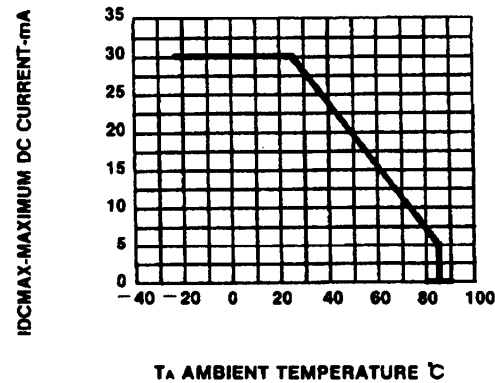


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE.

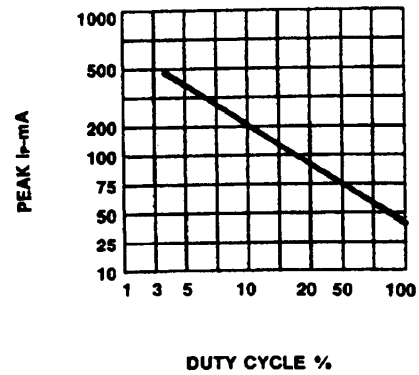


Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE  $f = 1 \text{ KHz}$ )

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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.