

## FND 500, FND 507 $\frac{1}{2}$ in. Single Digit Numeric Display

### GENERAL DESCRIPTION

The FND500 and FND507 are Red GaAsP Single Digit, 7-segment LED Displays with a nominal  $\frac{1}{2}$  in. character height. The FND500 has common cathode configuration. The FND507 has common anode configuration. These display devices are for applications where the viewer is within twenty feet of the display. Each digit has a brightness code (05, 06, 07...) for constructing arrays with closely matched digits.

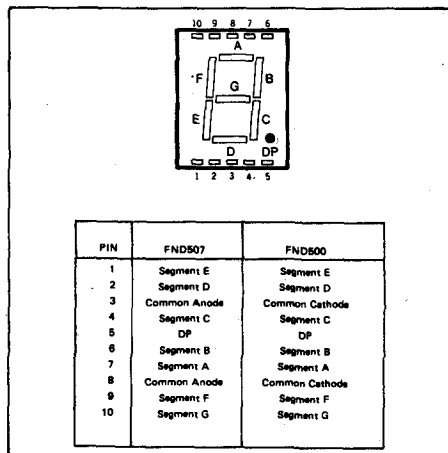
### ABSOLUTE MAXIMUM RATINGS

Junction temperature	—25°C to +85°C
Storage temperature	—25°C to +85°C
Solder temperature (5 seconds)	260°C
Relative humidity @ 65°C	98%
$V_R$ Reverse voltage	3.0V
$I_F$ (Avg) Average forward current/segment or decimal point	25mA
Derate from 25°C ambient tempera- ture	0.3mA/°C
$I_p$ Peak current/ segment or decimal point (100µs pulse width) 1000 PPS, $T_A = 25^\circ\text{C}$	200mA

### ELECTRICAL AND RADIANT CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ )

Symbol	Characteristic	Min.	Typ.	Max.	Units	Test Conditions
$I_o$	Axial Luminous Intensity, Each Segment	240	600	—	µcd	$I_F = 20\text{ mA}$
$V_F$	Forward Voltage	1.5	1.7	2.0	V	$I_F = 20\text{ mA}$
$BV_R$	Reverse Breakdown Voltage	3.0	12	—	V	$I_R = 1.0\text{ mA}$
$\phi 1/2$	Viewing Angle to Half Intensity	—	±25	—	degrees	
$L_o$	Average Segment Luminance	—	35	—	ftL	$I_F = 20\text{ mA}$
$\lambda_{pk}$	Peak Wavelength	—	650	—	nm	$I_F = 20\text{ mA}$
$\Delta I_o$	Intensity Matching, Segment to Segment	—	±33	—	%	$I_F = 20\text{ mA}$
	Intensity Matching, Within One Intensity Class	—	±20	—	%	$I_F = 20\text{ mA}$ on all segments at once

### PIN CONNECTIONS



### FEATURES

Low current requirements of typically 5.0 mA/segment  
 Low voltage of typically 1.7  $V_F$   
 Fits standard dip sockets with 0.6" pin row  
 Decimal point on lower right-hand side  
 Overflow point on upper left-hand side with digit reversed  
 Maximised contrast ratio with integral lens cap  
 Horizontal stacking 0.6" minimum, 1" typical  
 Common cathode or common anode

### REFERENCE TABLE

Code	Stock No.
FND500	35449X
FND507	35450C