

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.

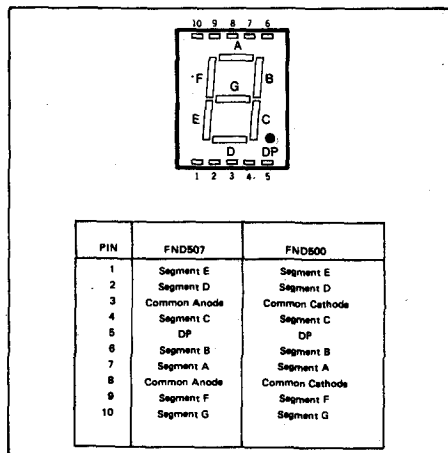
ABSOLUTE MAXIMUM RATINGS

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 temperature	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	$I_F = 20\text{ mA}$
λ_{pk}	Peak Wavelength	—	650	—	nm	$I_F = 20\text{ mA}$
ΔI_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