

12-Element Bar Display

FNA12

Optoelectronic Products

General Description

The FNA12 is a red 12-element analog display in a convenient, stackable dual in-line package. Applications include analog meter readouts, radio frequency indicator, or computer register displays.

12-Element Dual In-Line Package

End-Stackable For Scale Expansion

Separate Anode And Cathode Connections For Wiring Convenience

Up To 100 mA Peak Drive Current (20% Duty Cycle For High Ambient Conditions)

Absolute Maximum Ratings

Maximum Temperature and Humidity

Operating Temperature	-40°C to +80°C
Storage Temperature	-40°C to +80°C
Pin Temperature (Soldering, 5 s)	230°C
Relative Humidity at 85°C	85%

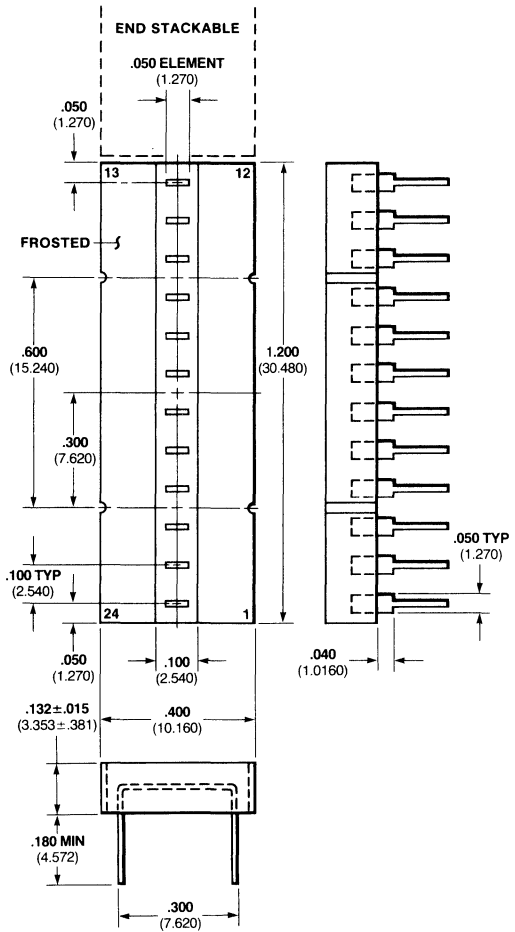
Maximum Power Dissipation

Total Dissipation at $T_A = 25^\circ\text{C}$	100 mW
Derate Linearly from 25°C	1.33 mW/°C

Maximum Voltage and Currents

V_R Reverse Voltage	3.0 V
I_F Average Forward dc Current per Element	20 mA
I_{pk} Peak Forward Current (1.0 μs Pulse Width)	1.0 A

Package Outline



Notes

All dimensions in inches **bold** and millimeters (parentheses)
Tolerance unless specified = $\pm .015$ (0.381)

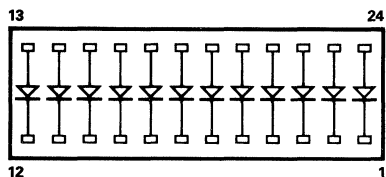
Electrical and Radiant Characteristics $T_A = 25^\circ\text{C}$

Symbol	Characteristic	Min	Typ	Max	Units	Test Conditions
V_F	Forward Voltage		1.7	2.0	V	$I_F = 20 \text{ mA/seg}$
V_R	Reverse Voltage	3.0			V	$I_R = 100 \mu\text{A}$
I_O	Axial Luminous Intensity	60	100		μcd	$I_F = 6 \text{ mA/seg}$
		100	200		μcd	$I_F = 10 \text{ mA}$
λ_{pk}	Peak Wavelength		665		nm	$I_F = 20 \text{ mA/seg}$
ΔI	Intensity Matching Maximum Variation		± 33		%	

Connection Diagram Typical Electrical Characteristic Curves

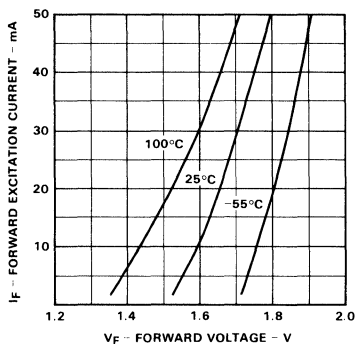
FNA12

**Connection Diagram
Bottom View**

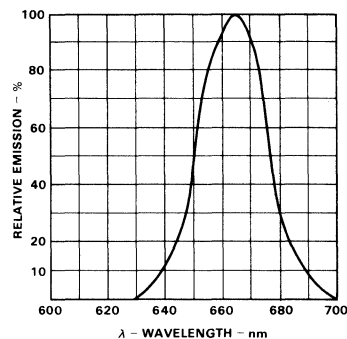


Pin		Pin	
1	Cathode 1	13	Anode 12
2	Cathode 2	14	Anode 11
3	Cathode 3	15	Anode 10
4	Cathode 4	16	Anode 9
5	Cathode 5	17	Anode 8
6	Cathode 6	18	Anode 7
7	Cathode 7	19	Anode 6
8	Cathode 8	20	Anode 5
9	Cathode 9	21	Anode 4
10	Cathode 10	22	Anode 3
11	Cathode 11	23	Anode 2
12	Cathode 12	24	Anode 1

Forward Current vs Forward Voltage



Emission Spectrum



Relative Luminous Intensity vs Forward Current

