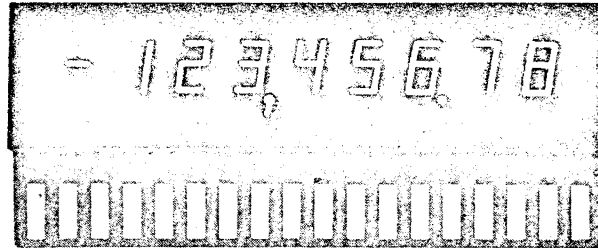


SPERRY SP-425-09 INFORMATION DISPLAY


(ACTUAL SIZE)

GENERAL DESCRIPTION

Sperry SP-425-09 Information Displays are long life, planar plasma display panels intended for direct interfacing with MOS/LSI. One panel contains nine digits, and each digit position includes a decimal point and a comma. Each digit is formed from seven segments, which provide the capability to display any number from zero to nine.

The Sperry SP-425-09 is intended for multiplex operation. All cathodes (segments) are internally bussed; thus, only nine cathode connections are required: one for each segment plus the decimal point and the comma. A separate anode connection is provided for each digit position. Sequential scan multiplex operation is recommended. The preferred scan sequence should be from right to left as facing the display.

Characters are displayed by successively applying a positive signal to the anodes corresponding to each character position. At the same time, current is applied to the appropriate cathode buss. The result is an attractive orange glow which displays an eye-appealing character or number.

FEATURES

Character Height	0.25 inch
Character Centerline Spacing	0.28 inch
Color	Orange (Neon Glow)
Color Spectrum	5700 to 6500 Angstroms
Brightness	85 foot lamberts
Viewing Angle	130 degrees
Viewing Distance	15 feet

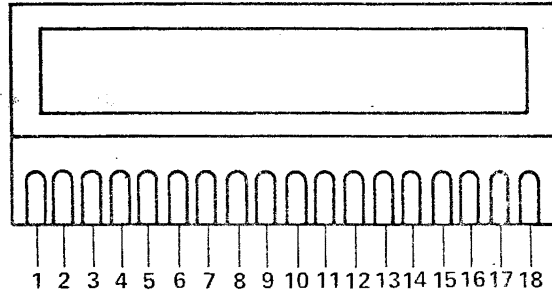
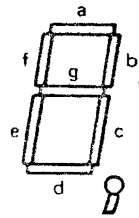
OPERATIONAL CHARACTERISTICS

<u>Specifications</u>	<u>Minimum</u>	<u>Typical</u>	<u>Maximum</u>
Display Supply Voltage ⁽¹⁾⁽²⁾	165 vdc	180 vdc	245 vdc
Anode to Anode Differential Voltage	—	—	110 vdc
Anode Voltage Swing	40 vdc	—	110 vdc
Cathode Current Segments a, d, f, g	200 μ A	300 μ A	400 μ A
Cathode Current, Segments b, e	250 μ A	380 μ A	500 μ A
Cathode Current, Segment c	300 μ A	450 μ A	600 μ A
Cathode Current, Decimal Point	180 μ A	170 μ A	360 μ A
Cathode Current, Comma	120 μ A	180 μ A	250 μ A
Operating Temperature	0°C	—	55°C
Storage Temperature	-40°C	—	70°C
<u>Multiplex Criteria</u>			
Digit On-Time	80 μ sec	150 μ sec	1200 μ sec
Digit Off-Time	—	1.5 msec	11 msec
(Refresh Time) ³			
Interdigit Blanking Time	0 μ sec	50 μ sec	—

NOTES:

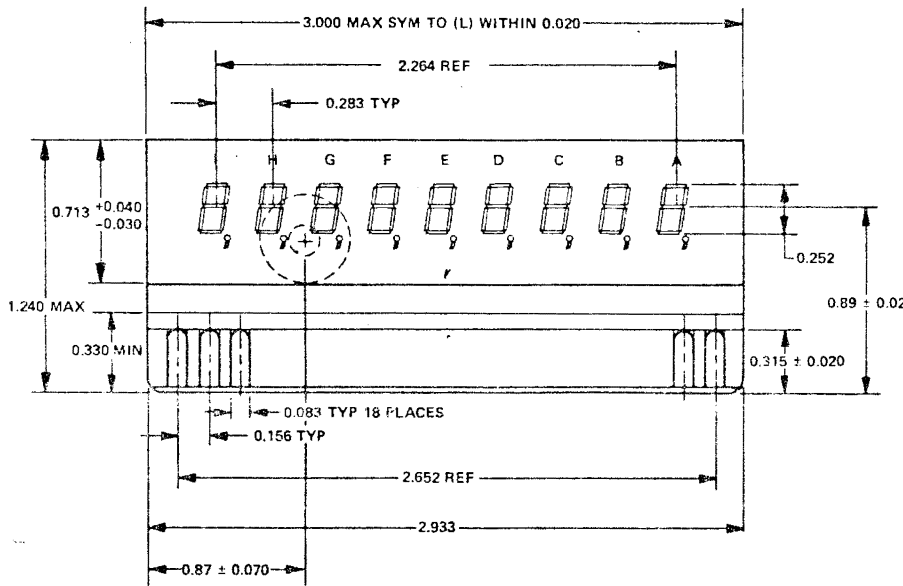
1. The minimum recommended anode voltage required to fire the display is 165 volts dc. Typical cathode current is assumed.
2. Prior to ionization, the voltage between the anode and any cathode may equal this voltage and panel damage will not occur. The peak cathode current must, however, be limited to the absolute maximum rating.
3. Digit off-time is measured with anode supply voltage of 195 volts, minimum segment current values, and digit on-time of 200 microseconds.
4. Blanking can be reduced to zero if display supply and segment current are operated at typical or lower values.

**SEGMENT DESIGNATIONS
AND PIN CONNECTIONS**

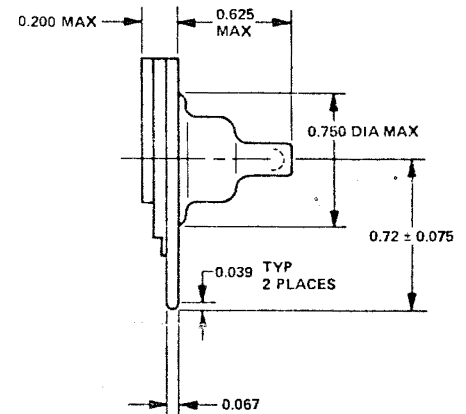


Segment	Pin Number	Anode	Pin Number
a	18	A	14
b	17	B	13
c	16	C	12
d	4	D	11
e	3	E	10
f	1	F	9
g	2	G	8
decimal	15	H	7
comma	5	I	6

OUTLINE DRAWING



FRONT VIEW



END

CONNECTORS

The following connectors may be used with the Sperry SP-425-09 Information Displays:

Company	Part Number
Cinch	250-18-30-170
Cinch	250-18-30-171
Amphenol	225-21811-401 (117)
Amphenol	225-21811-401
Winchester	HB 18S0

FOR ADDITIONAL INFORMATION OR QUOTATIONS, PLEASE CONTACT THE MARKETING DEPARTMENT,
SPERRY INFORMATION DISPLAYS DIVISION
TELEPHONE (602) 947-8371 • TELEX 667-498