

925H/935H

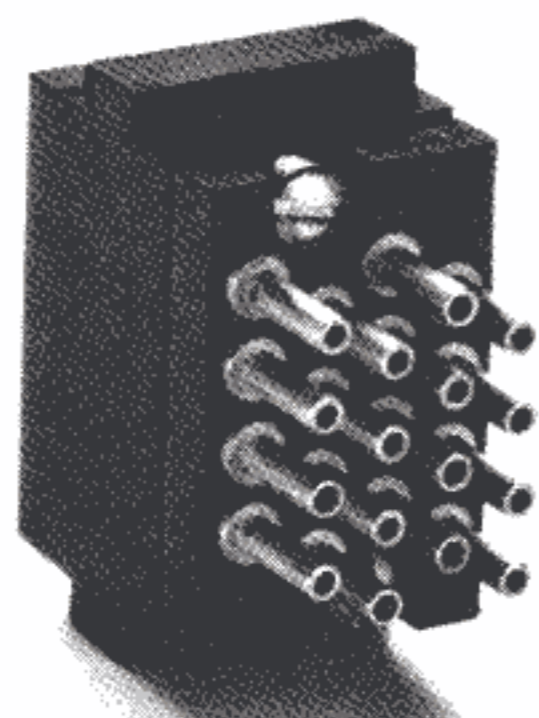
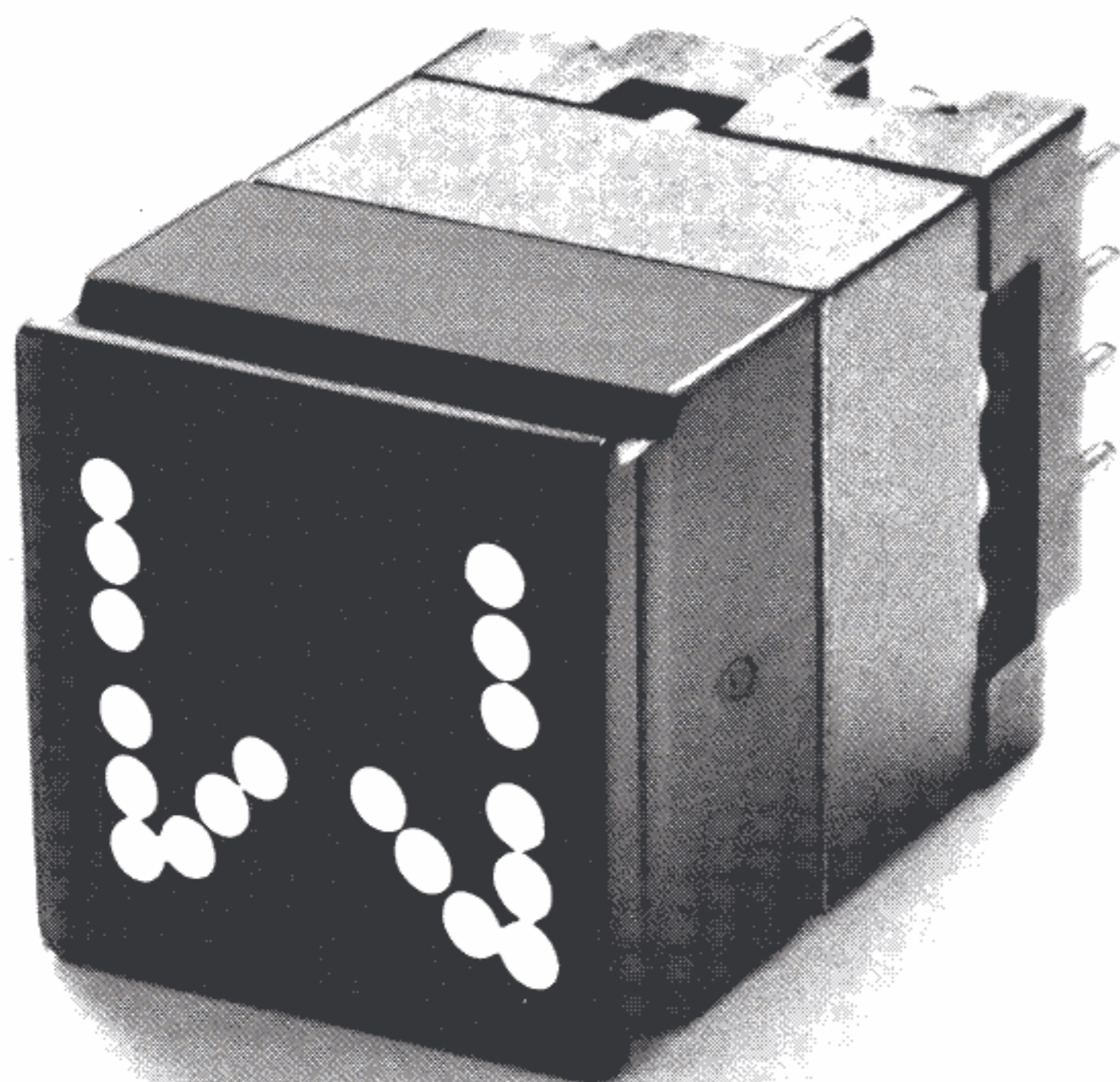
QUALIFIED TO MIL-D-28803/3 and /4

The 925H/935H incandescent display provides optimum brightness for avionic and control panels where high ambient light levels are present.

They feature excellent legibility and readability in direct sunlight and are environmentally protected meeting the shock and vibration requirements of MIL-STD-202, EMI/RFI requirements, and the dripproof, 45° requirements of MIL-STD-108.

The 925H/935H have a "building block" modular construction for ease of initial readout design, character arrangement and module replacement. Maintainability of the display is simple since incandescent lamps are front panel replaceable without special tools.

Page 14 and 15 describe ordering information for complete and sub assemblies. Page 16 illustrates module types available and the corresponding rear terminations.

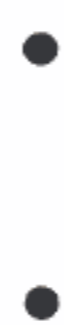


925H Actual Size



935H Actual Size

A. Characters



Front View of
Decimal Pt.,
Colon, Degree



Front View of
4-Segment
Display



Front View of
7-Segment
Display



Front View of
Double 7-Segment
Display



Front View of
Triple 7-Segment
Display



Front View of
9-Segment
Display



Front View of
16-Segment
Display

B. Light Sources — Incandescent

Specifications

Brightness: 300 Ft. Lamberts Minimum
 Contrast Ratio: 3:1 min in 10,000 foot Candles Ambient
 Current/Segment 25ma max @ 5VDC
 Lamp Life: 6,000 hr. average life @ 4.5VDC
 Operating Temp: -55° to ±85°C
 Storage Temp -55° to ±85°C
 Lamp replacement is accomplished from the panel front without special tools.

C. Terminations

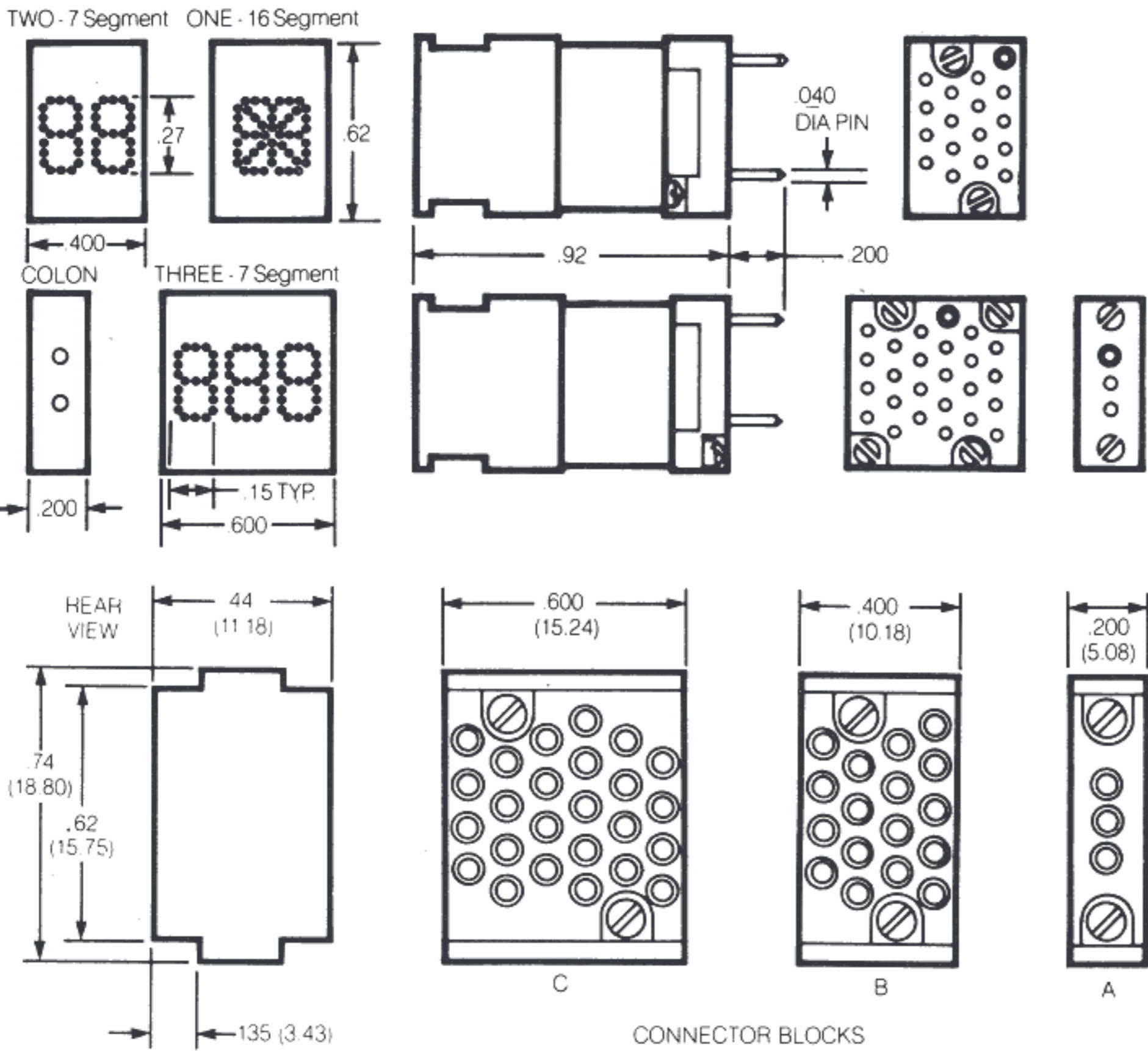
Solder or crimp type terminals which lock into place in a connector block use standard MS3191 crimp tool (MSC No. 800-3191) and locator (MSC No. 800-3191-L20-2). Each terminal will hold one No. 26 or one No. 28 AWG wire.

Environmental Specifications:

Vibration: Per MIL-STD-202, method 204, condition A.
 Shock: Per MIL-STD-202, method 213, Condition A.
 Moisture Resistance: Per MIL-STD-202, method 106 (omit steps 7a & 7b). 25°C to 65°C, 80-98%, 10 cycles.
 Salt Spray: per MIL-STD-202, method 101, condition B.
 Seal: Per MIL-STD-108, dripproof, 45°, applies to 925HBZ only).

925H/935H

Dimensions - Individual Readout Units - 925H



*935H dimensions are identical except Bar Segment character is as shown on sheet 22.

TABLE 1
Panel Thickness & Segment Type

BAR MATRIX	DOT MATRIX	PANEL THICKNESS	MODULE CODE	MODULE TYPE
6	1	.250" (6.35mm)	A	Module: Colon, Degree or Decimal
7	2	.190" (4.83mm)	B	Module: 16 Segment, Alpha-Numeric
8	3	.125" (3.18mm)	C	Module: 2 - 7 Segment Numeric
9	4	.063" (1.60mm)	D	Module: 4 Segment Sign & 7 Segment Numeric
0	5	.093" (2.63mm)	E	Module: Colon - 7 Segment Numeric
			F	Module: 7 Segment Numeric & Colon
			G	Module: 3 - 7 Segment Numeric
			H	Module: 1 - 4 Seg. Sign & 2 - 7 Seg. Numeric
			J	Module: Colon & 2 - 7 Segment Numeric
			K	Module: 7 Segment, Colon & 7 Segment
			L	Module: 2 - 7 Segment Numeric & Colon
			M	Module: 9 Segment
			T	Module: N/S (North/South)
			U	Module: E/W (East/West)
			V	Module: 7 Segment, Decimal, 7 Segment
			W	Module: 2 - 75 Segment, 2 Decimals

TABLE 2
Module Type

Ordering Information

Complete Assembly M28803/3

The 925H/935H can be ordered as a complete assembly using either the EATON part number or the military part number (M28803/3). A complete assembly consists of a bezel assembly, a mounting rail assembly, and any arrangement of plug in modules.

Using EATON part number

**925H/
935H**

1

D C E F B B

Model Number

Designates .250 panel thickness and segment type (see Table 1)

Designates module type and their location in complete unit (see Table 2) as viewed from left to right.

When ordering using the military part number simply replace the EATON model number with military designation as follows:

M28803/3

1

D C E F B B

Designates a complete military approved display

Designates .250 panel thickness and segment type (see Table 1)

Designates module types and their location in the complete assembly (see Table 2)

Sub Assemblies M28803/4

Because of the "building block" modular design of the 925H/935H, spare or replacement modules, terminals, lamps and connector blocks can be ordered individually. Subassemblies can be ordered with EATON part number or the military part number (M28803/4). Table 3, page 15, is a cross reference of EATON part numbers with the equivalent military part number for all subassemblies available.

NOTE: Module types shown in Table 2 correspond to those illustrated on page 16.

TABLE 3 — Subassembly Part Numbers

BAR		DOT MATRIX		DESCRIPTION
EATON Designation	Military Part Number	EATON DESIGNATION	MILITARY PART NO.	
235H-A1	M28803/4-A1	925H-A	M28803/4-A	Module: Colon, Degree or Decimal
B1	B1	925H-B	M28803/4-B	Module: 16 Segment, Alpha-Numeric
C1	C1	925H-C	M28803/4-C	Module: 2 - 7 Segment Numeric
D1	D1	925H-D	M28803/4-D	Module: 4 Segment Sign & 7 Segment Numeric
E1	E1	925H-E	M28803/4-E	Module: Colon & 7 Segment Numeric
F1	F1	925H-F	M28803/4-F	Module: 7 Segment Numeric & Colon
G1	G1	925H-G	M28803/4-G	Module: 3 - 7 Segment Numeric
H1	H1	925H-H	M28803/4-H	Module: 1 - 4 Segment Sign & 2 - 7 Segment Numeric
J1	J1	925H-J	M28803/4-J	Module: Colon & 2 - 7 Segment Numeric
K1	K1	925H-K	M28803/4-K	Module: 7 Segment, Colon & 7 Segment
L1	L1	925H-L	M28803/4-L	Module: 2 - 7 Segment Numeric & Colon
M1	M1	925H-M	M28803/4-M	Module: 9 Segment
N	N	925H-N	M28803/4-N	Module: Connector Block: .200 Wide 1/
P	P	925H-P	M28803/4-P	Module: Connector Block: .400 Wide 1/
Q	Q	925H-Q	M28803/4-Q	Module: Connector Block: .600 Wide 1/
R	R	925H-R	M28803/4-R	Module: Terminal - (Ten to a Bag)
S	S	925H-S	M28803/4-S	Module: Lamp Assembly
T1	T1	925H-T	M28803/4-T	Module: N/S (North/South)
U1	U1	925H-U	M28803/4-U	Module: E/W (East/West)
V1	V1	925H-V	M28803/4-V	Module: 7 Segment, Decimal, 7 Segment
W1	W1	925H-W	M28803/4-W	Module: 7 Segment, Decimal Point, 7 Segment, Decimal Point

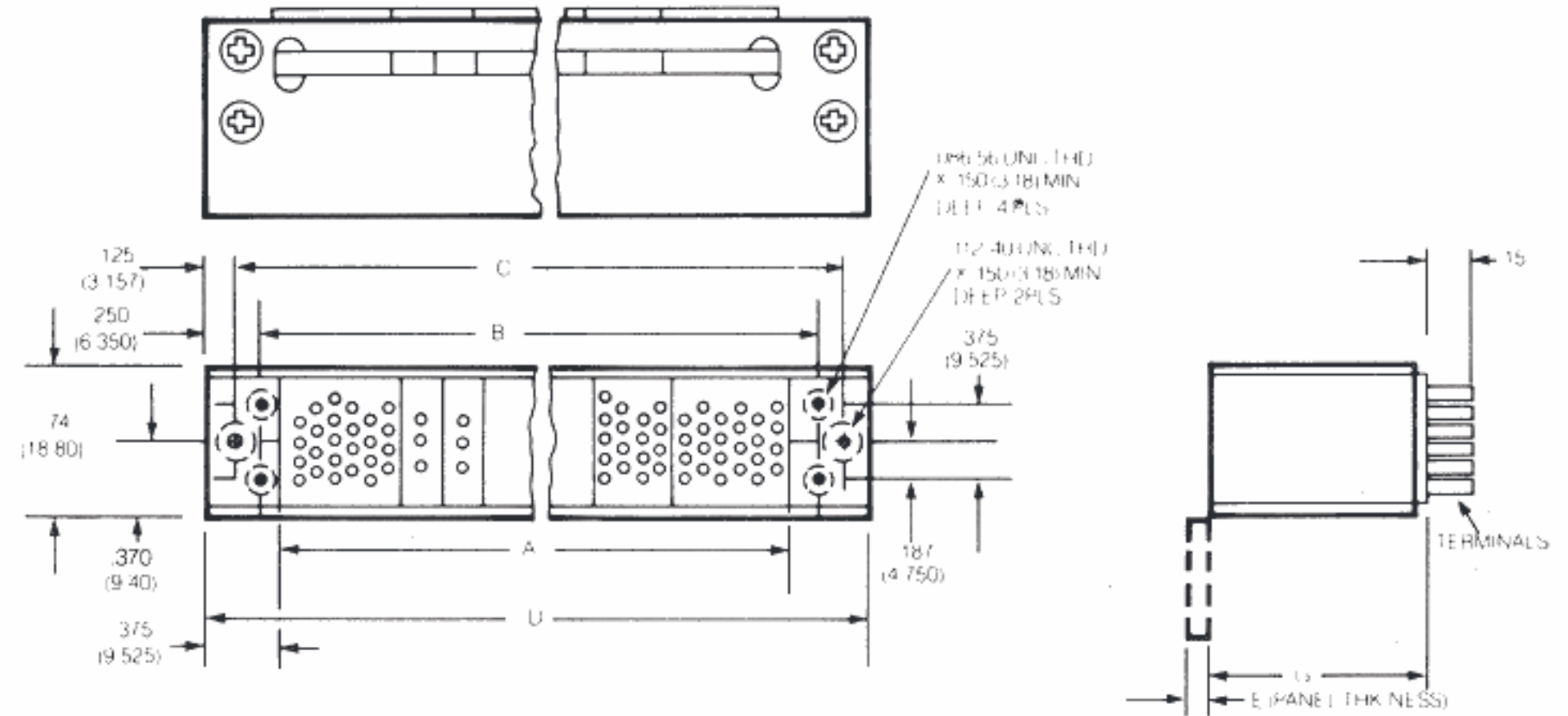
1/ Connector blocks are furnished with the required number of terminals plus two extra

Mounting Rail Assembly

When ordering a mounting rail it is necessary to specify the module types so the proper connector types are provided in the assembly. The proper amount of terminals (plus two) are provided with each connector block ordered.



925H-R (M28803/4-R)



MOUNTING RAIL DIMENSIONS TABLE 4

SYMBOL	DIMENSION
A	DIM. L + .05 (1.27)
B	DIM. L + .300 (7.62)
C	DIM. L + .550 (13.97)
D	DIM. L + .80 (20.32)

MOUNTING RAIL ASSEMBLY PANEL THICKNESS (SAME AS TABLE 1, PAGE 14)

CODE	DIM. E	DIM. G
1	.250 (6.35)	.86 (21.84)
2	.190 (4.83)	.92 (23.37)
3	.125 (3.18)	.99 (25.15)
4	.063 (1.60)	1.05 (26.67)
5	.093 (2.63)	1.02 (25.91)

Mounting Rails and Bezels

Mounting rails and bezels can only be ordered separately using the EATON part number as follows:

Bezel Assembly

TABLE 4 — Aggregate Length

925H/935H BZ 1.6 R

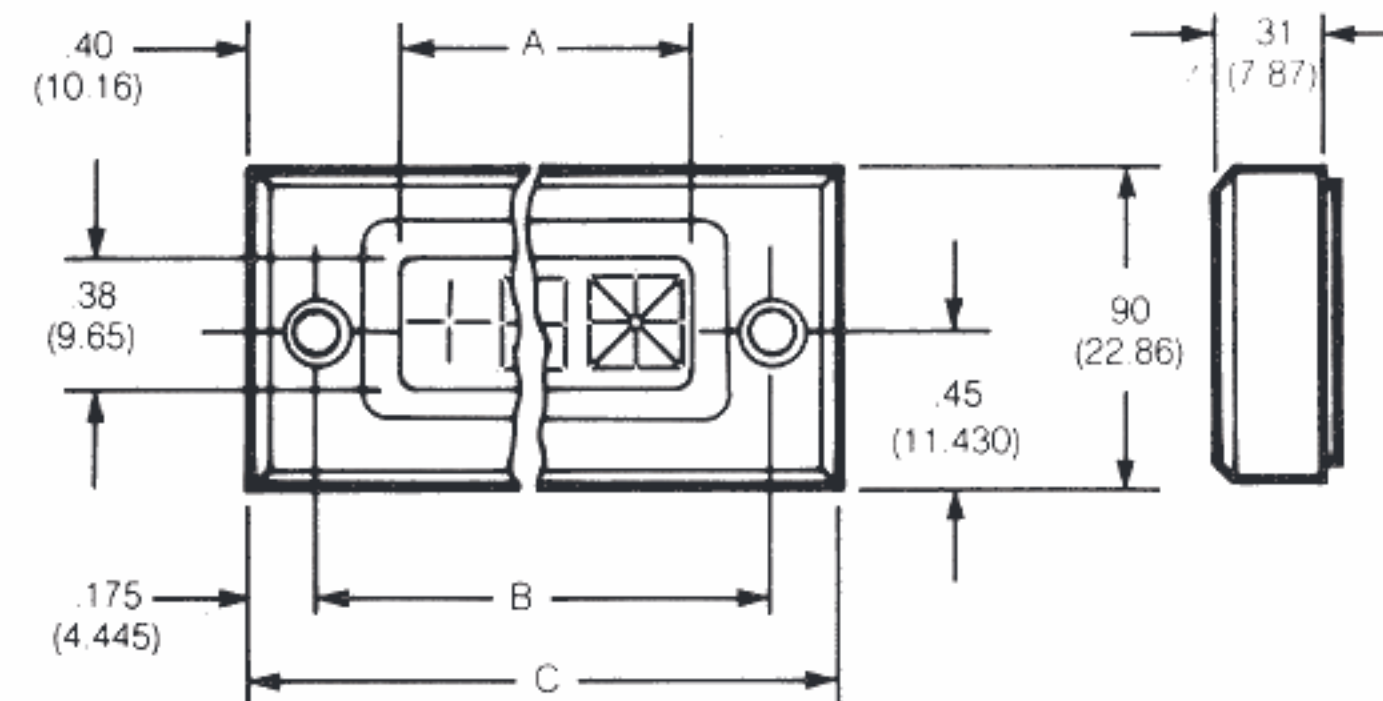
Model Number

Designates Bezel Assembly

Designates total length (Dimension L) of all modules specified

Designates lens color filter:
 N — Neutral G — Green
 Grey A — Amber
 For White B — Blue
 Incandescent R — Red

TYPE OF MODULE	DIMENSION L
16 SEG.	MULTIPLY THE NO. OF 16 SEG. X .40 (10.16)
7 SEG.	MULTIPLY THE NO. OF 7 SEG. X .20 (5.08)
4 SEG.	MULTIPLY THE NO. OF 4 SEG. X .20 (5.08)
COLON	MULTIPLY THE NO. OF COLON X .20 (5.08)
9 SEG.	MULTIPLY THE NO. OF 9 SEG. X .40 (10.16)
DPT	MULTIPLY THE NO. OF DPT X .20 (5.08)
DEG	MULTIPLY THE NO. OF DEG X .20 (5.08)
NORTH/SOUTH	MULTIPLY THE NO. OF N/S X .20 (5.08)
EAST/WEST	MULTIPLY THE NO. OF E/W X .20 (5.08)
2-7 SEG. & DPT	MULTIPLY THE NO. X .40 (10.16)
2-7 SEG. & 2 DPT	MULTIPLY THE NO. X .60



BEZEL DIMENSIONS

SYMBOL	DIMENSION
A	DIM. L + .10 (2.54)
B	DIM. L + .550 (13.97)
C	DIM. L + .90 (22.86)

TOLERANCE	
.XX	± .03
.XXX	± .010

925H/935H

R 1 1.6 BAC

Model Number

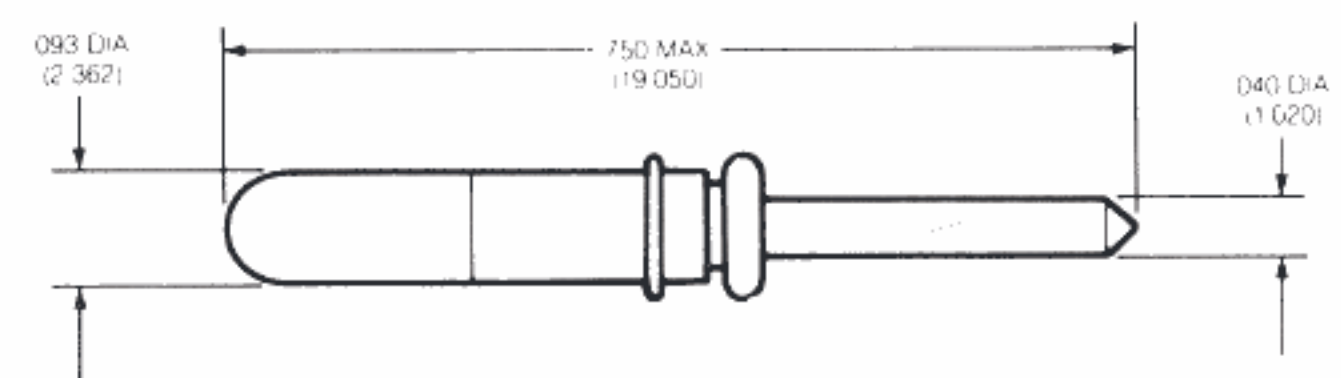
Designates Rail Assembly

Designates Panel Thickness. (See Table 1, Page 14)

Designates total aggregate length (Dimension L) of all modules specified

(see Table 4)

Designates type of module connector and location (See Table 2) as viewed from left to right (IN ASS'Y.)

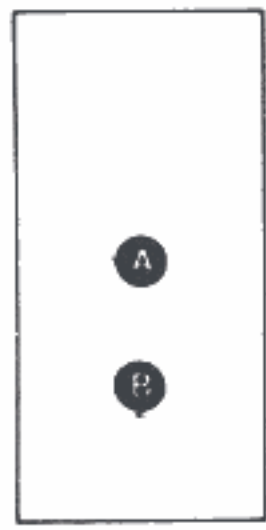


925H/935H-S (M28803/4 S) LAMP ASSEMBLY

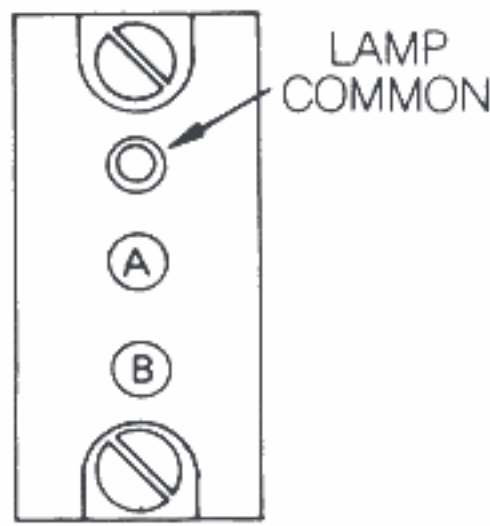
925H/935H

Module Type/Segment & Terminal Designations

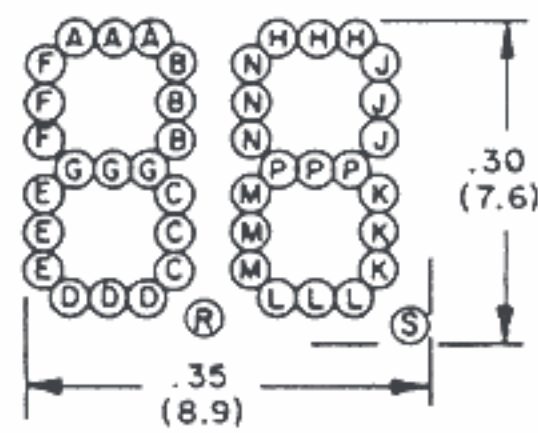
MODULE
FRONT VIEW
Colon
Designations



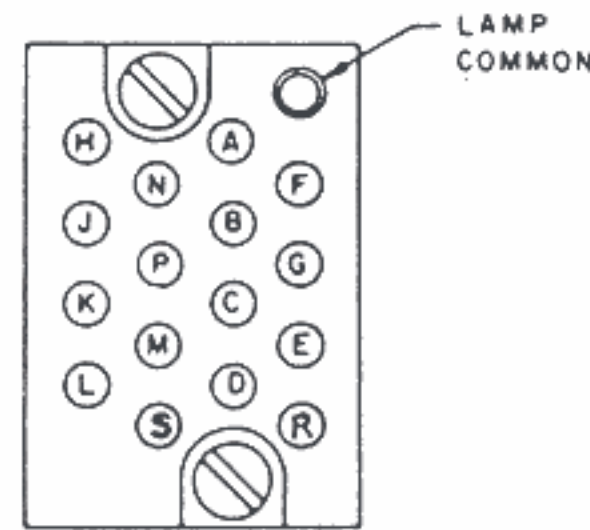
TYPE A
REAR VIEW
Terminations



TYPE W
FRONT VIEW



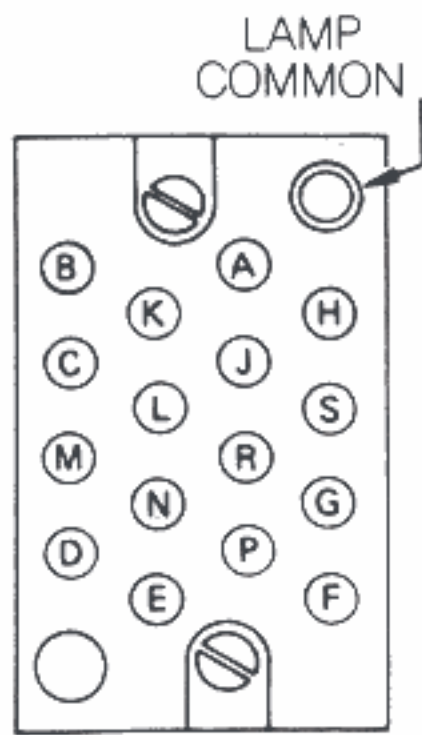
REAR VIEW



TYPE B

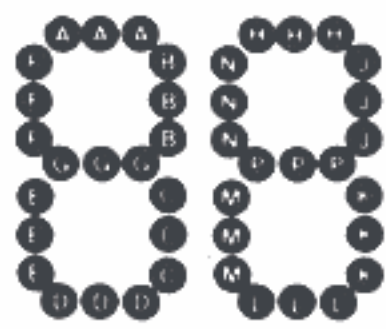


FRONT VIEW
16-Segment
Designations

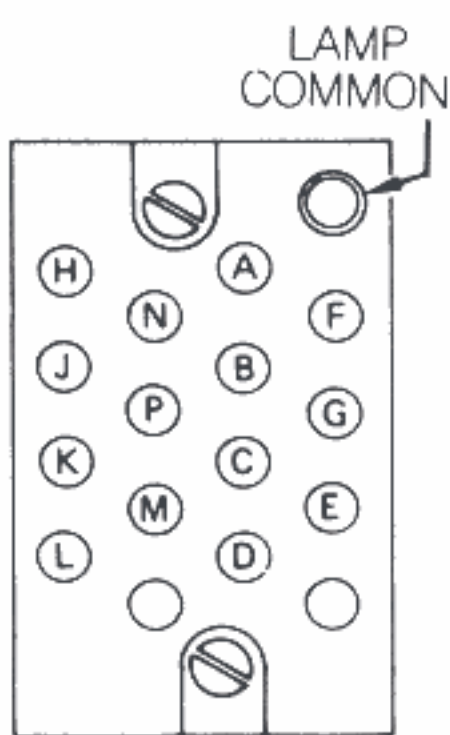


REAR VIEW
Terminations

TYPE C

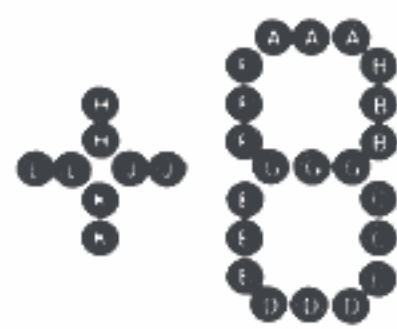


FRONT VIEW
TWO 7-Segment
Designations

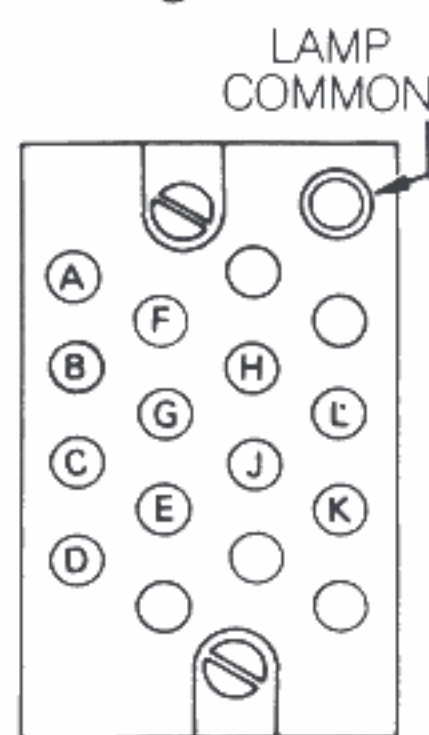


REAR VIEW
Terminations

TYPE D

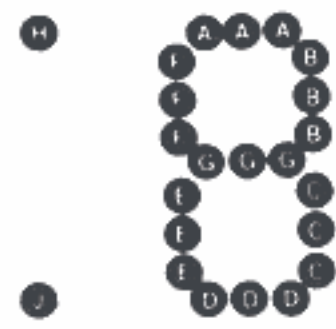


FRONT VIEW
4-Segment and
TWO 7-Segment
Designations

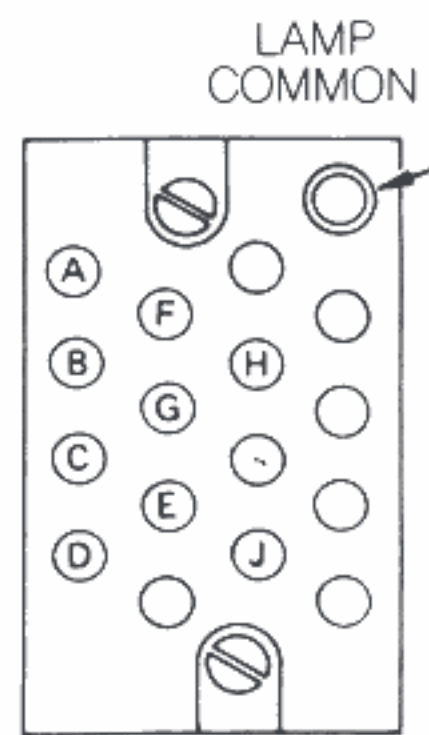


REAR VIEW
Terminations

TYPE E

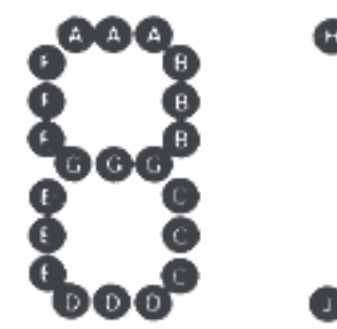


FRONT VIEW
Colon & 7-Seg.
Designations

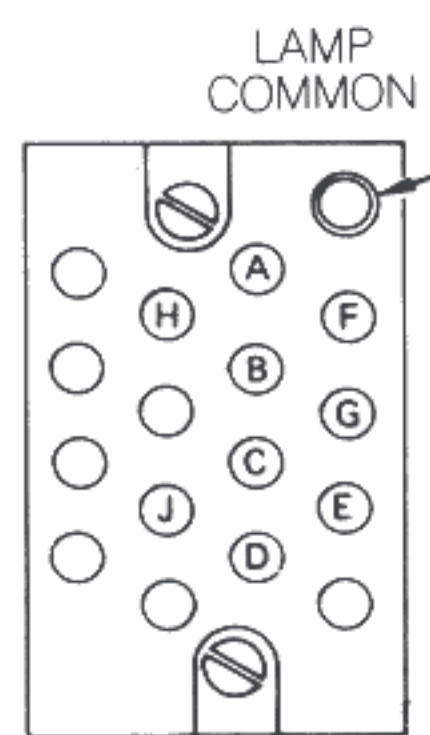


REAR VIEW
Terminations

TYPE F



FRONT VIEW
7-Seg. & Colon
Designations

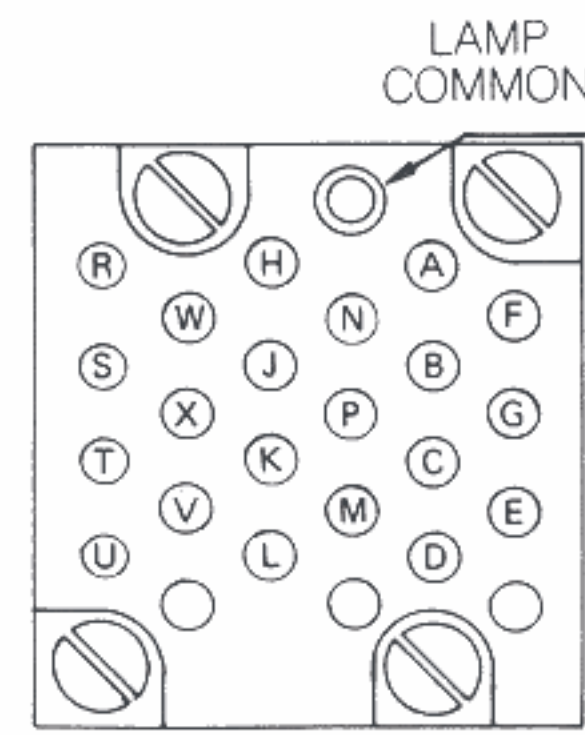


REAR VIEW
Terminations

TYPE G



FRONT VIEW
THREE 7-Segment
Designations

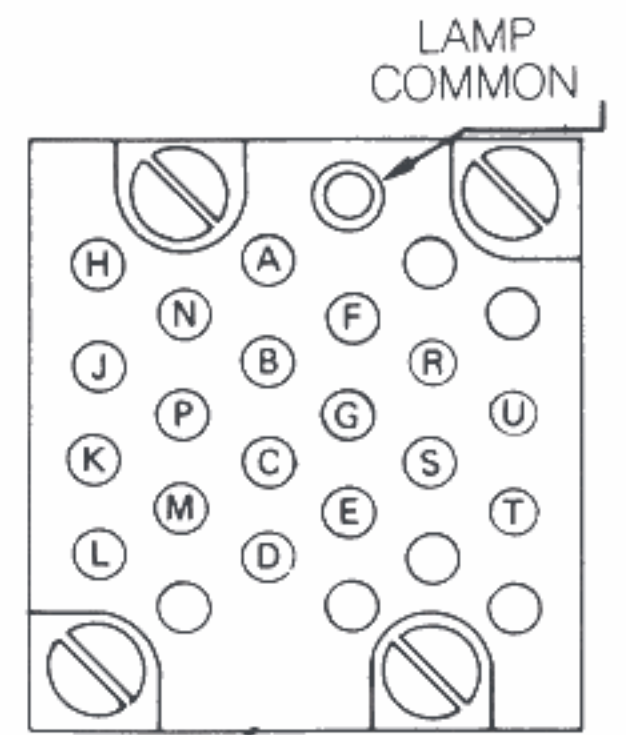


REAR VIEW
Terminations

TYPE H



FRONT VIEW
4-Seg. & 7-Seg.
Designations

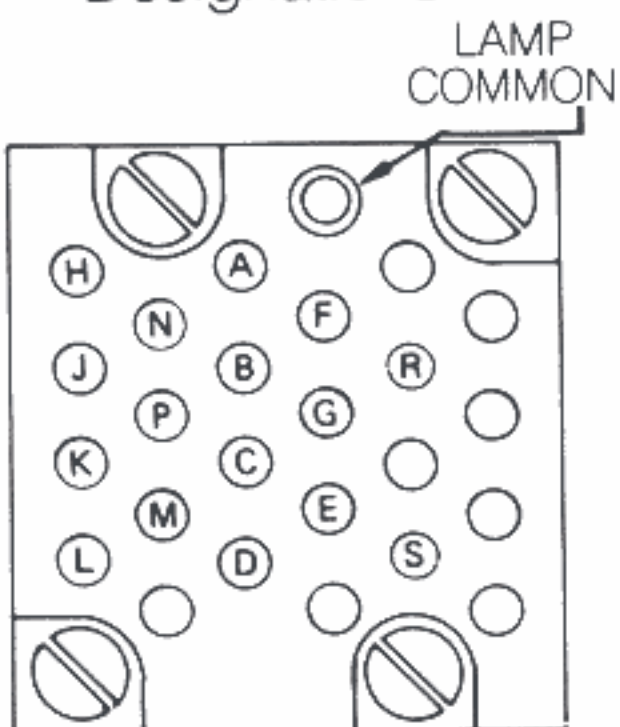


REAR VIEW
Terminations

TYPE J

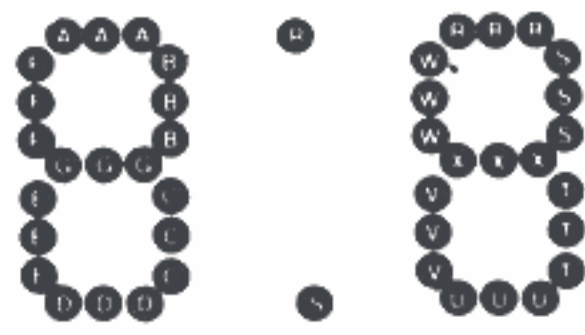


FRONT VIEW
Colon and
TWO 7-Segment
Designations

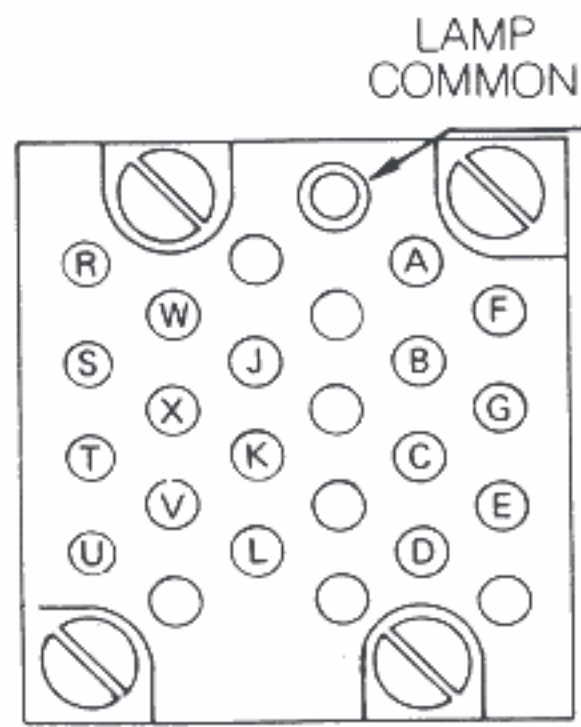


REAR VIEW
Terminations

TYPE K



FRONT VIEW
7-Seg., Colon, 7-Seg.
Designations

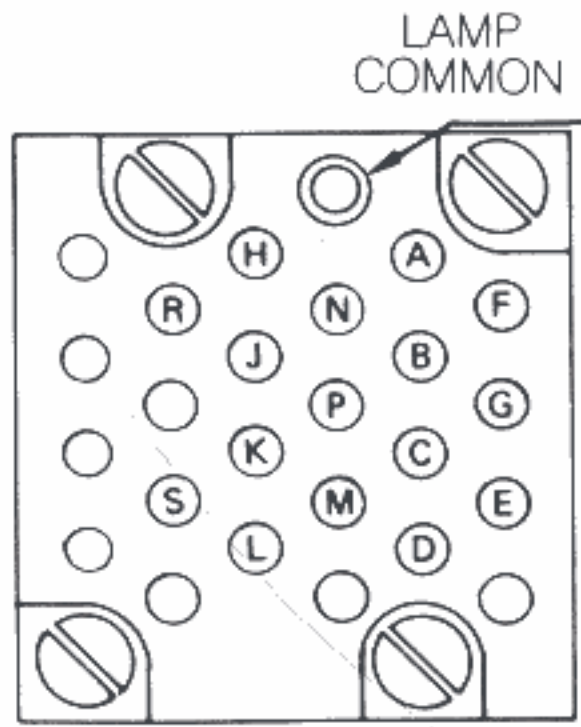


REAR VIEW
Terminations

TYPE L



FRONT VIEW
TWO 7-Seg. & Colon
Designations

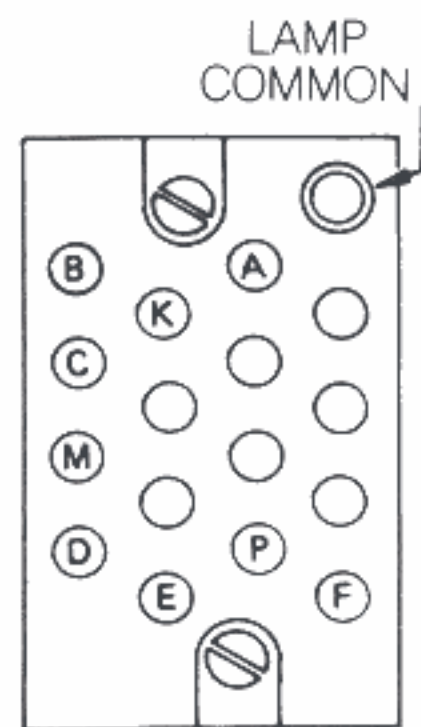


REAR VIEW
Terminations

TYPE M



FRONT VIEW
9-Segment
Designations

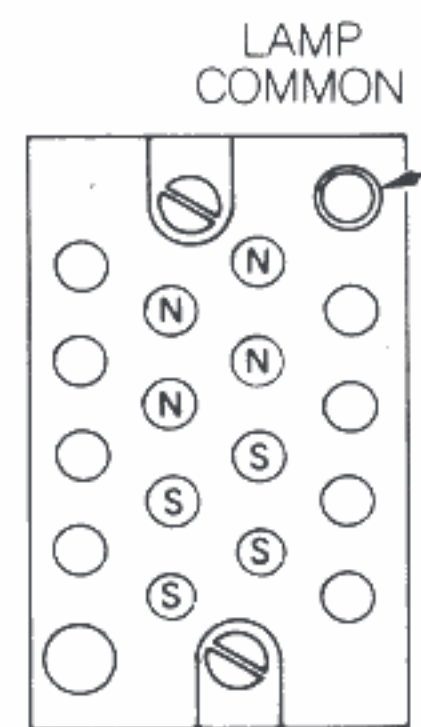


REAR VIEW
Terminations

TYPE T



FRONT VIEW
N/S

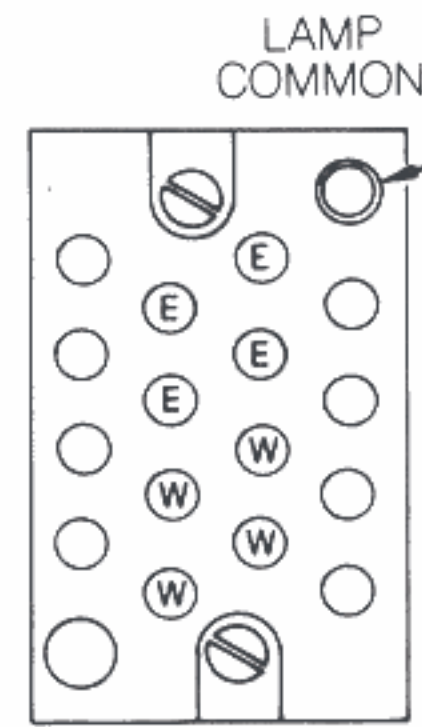


REAR VIEW
Terminations

TYPE U

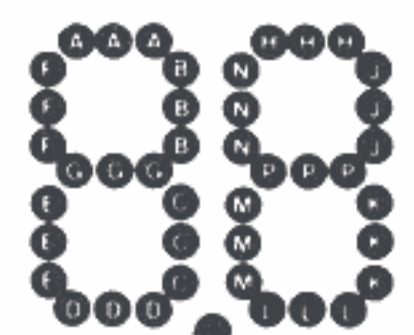


FRONT VIEW
E/W

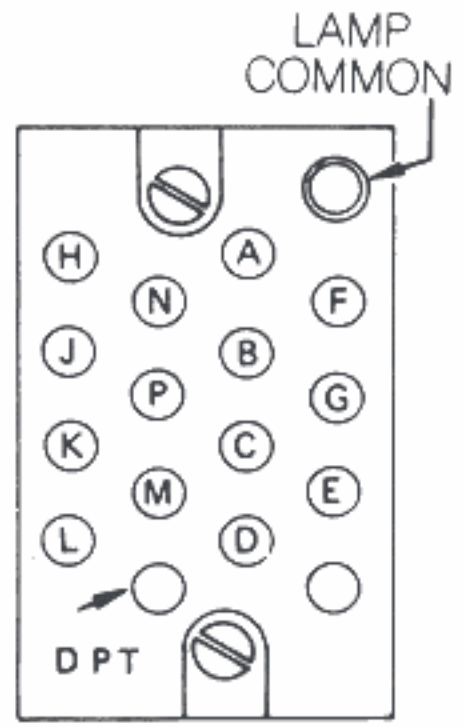


REAR VIEW
Terminations

TYPE V



FRONT VIEW
TWO 7-Seg.
and Dec. Pt.
Designations



REAR VIEW
Terminations