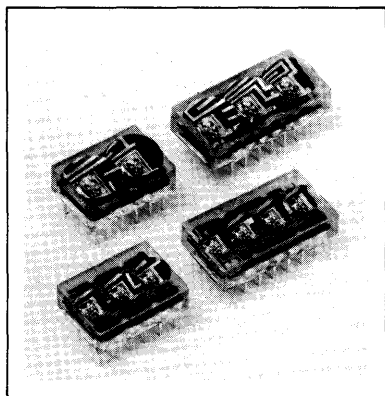


SIEMENS

DL-330M .11 INCH 3 DIGIT DL-430M .15 INCH 3 DIGIT

DL-340M .11 INCH 4 DIGIT DL-440M .15 INCH 2 DIGIT

RED 7 SEGMENT MAGNIFIED MONOLITHIC NUMERIC DISPLAY



FEATURES

- Rugged Encapsulated Package
- Integrated Magnifier Lens
- Monolithic Construction for Maximum Brightness at Minimum Power
- Common Cathode for Simplicity of Multiplexing
- Standard Dual-In-Line Package
- Categorized for Brightness Uniformity

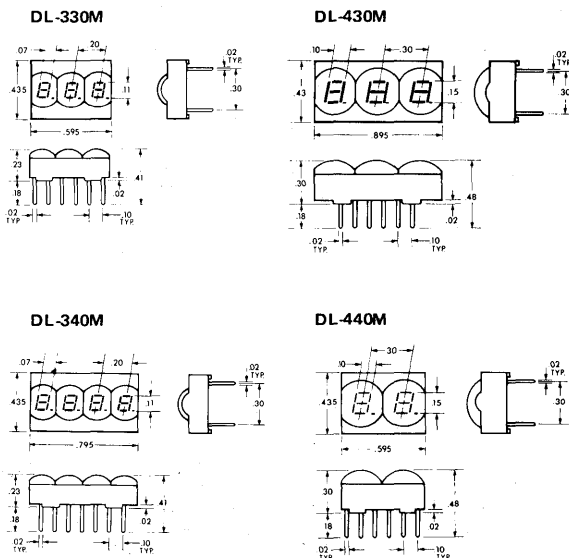
DESCRIPTION

The DL-330M/340M and DL-430M/440M are red numeric LED displays. Low cost is achieved through minimum use of monolithic GaAsP material and magnification to full height using a simple integrated lens construction. A red plexiglass or circularly polarized filter is recommended to enhance visibility and to eliminate glare from the surface of the package.

These displays are designed for multiplex operation, the desired digit being displayed by selecting the appropriate cathode. A right hand decimal point is provided.

All devices are optimized for low power portable battery operated equipment using MOS and CMOS integrated logic circuits such as DMM's and digital thermometers.

Package Dimensions in Inches (mm)



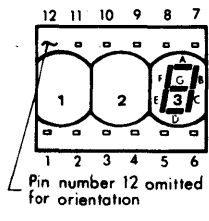
Maximum Ratings (at 25 °C)

Power Dissipation/Digit	80 mW
Derating Factor from 25 °C/Digit	1.8 mW/°C
Storage and Operating Temperature	-20 °C to +70 °C
Continuous Forward Current	
Per Segment and Decimal	20 mA
Per Digit Total	40 mA
Peak Inverse Voltage	
Per Segment and Decimal	3 V

Opto-Electronic Characteristics (at 25 °C)

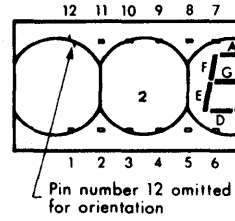
Parameter	Min	Typ	Max	Unit	Test Condition
Luminance	1.5			mcd	$I_F = 5 \text{ mA}$
Emission Peak Wavelength	650			nm	
Line Half-Width	40			nm	
Forward Voltage		1.7	2.0		$I_F = 20 \text{ mA}$
Dynamic Resistance	7			Ω	$I_F = 10 \text{ mA}$
Capacitance	50			pF	$V = 0, f = 1 \text{ MHz}$
Reverse Leakage			100	μA	$V_R = 3.0 \text{ V}$

Specifications subject to change without notice.



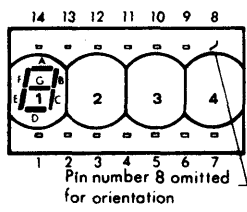
DL-330M

Pin	Function
1	Cathode D1
2	Anode E
3	Anode D
4	Cathode D2
5	Anode C
6	Anode DP
7	Cathode D3
8	Anode B
9	Anode G
10	Anode A
11	Anode F
12	No Pin



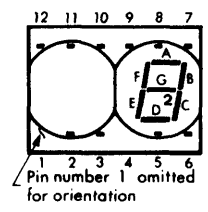
DL-430M

Pin	Function
1	Cathode D1
2	Anode E
3	Anode D
4	Cathode D2
5	Anode C
6	Anode DP
7	Cathode D3
8	Anode B
9	Anode G
10	Anode A
11	Anode F
12	No Pin



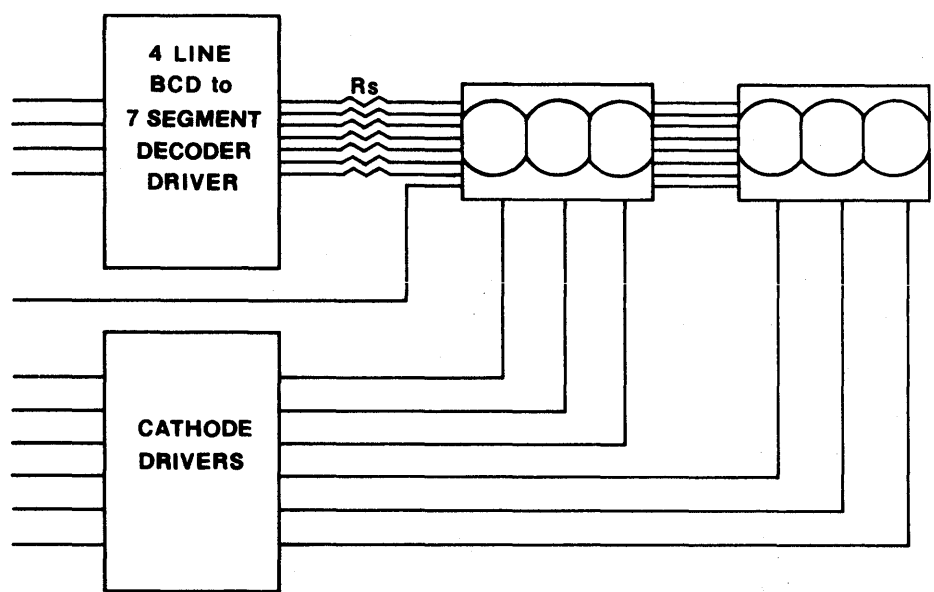
DL-340M

Pin	Function
1	No Connection
2	Anode E
3	Anode D
4	Anode C
5	Anode DP
6	Anode G
7	Cathode 4
8	No Pin
9	Anode B
10	Cathode 3
11	Anode F
12	Cathode 2
13	Anode A
14	Cathode 1



DL-440M

Pin	Function
1	No Pin
2	Anode E
3	Anode D
4	No Pin
5	Anode C
6	Anode DP
7	Cathode D2
8	Anode B
9	Anode G
10	Anode A
11	Anode F
12	Cathode D1



BLOCK DIAGRAM FOR TYPICAL DISPLAY DRIVE CIRCUITRY