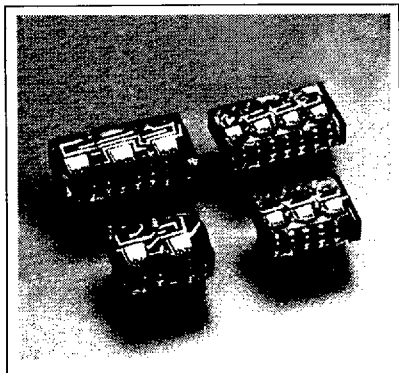


SIEMENS

.11" 3 DIGIT DL-330M
.11" 4 DIGIT DL-340M
.15" 3 DIGIT DL-430M
.15" 2 DIGIT DL-440M

**Red Seven Segment
Magnified Monolithic Numeric Display**



FEATURES

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

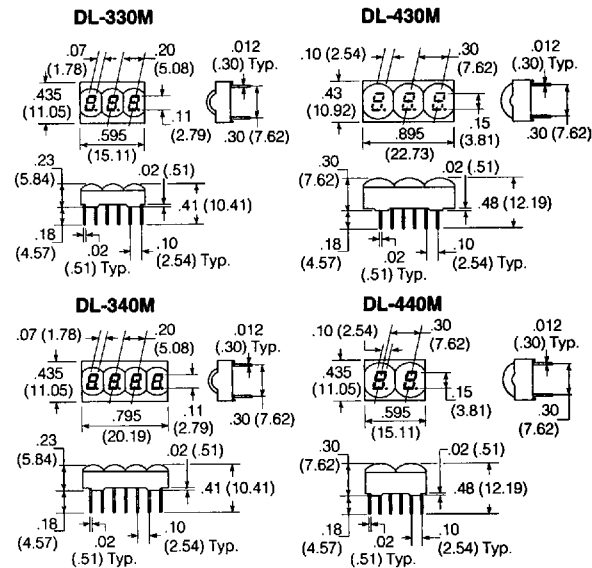
DESCRIPTION

The DL-330M/340M and DL-430/440M are numeric red LED displays with a right hand decimal point. 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 is displayed by selecting the appropriate cathode.

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

Package Dimensions in Inches (mm)

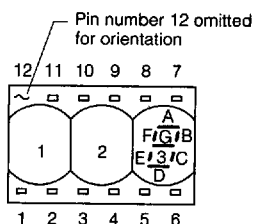


Maximum Ratings (at 25°C)

Operating Temperature and Storage Temperature	-20°C to +70°C
Continuous Forward Current per Segment and Decimal	7 mA
Peak Pulse Current (10 μ s)	50 mA
Peak Inverse Voltage per Segment and Decimal	3 V
Power Dissipation	320 mW
Derating Factor from 25°C/Digit	4.3 mW/°C

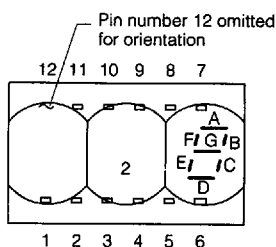
Characteristics ($T_A=25^\circ\text{C}$)

Parameter	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity (Total Digit)	1.0	2.5		mcd	$I_F=5$ mA/segment
Peak Emission Wavelength			660	nm	
Line Half-Width	40			nm	
Forward Voltage		1.7	2.0		$I_F=20$ mA/digit, $V_R=0$
Reverse Current			100	μ A	$V_R=3.0$ V



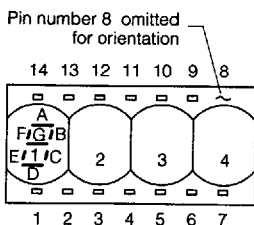
DL-330M

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



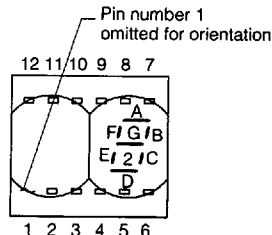
DL-430M

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

