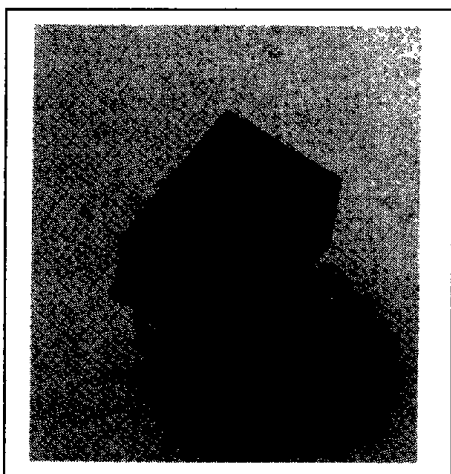


SIEMENS

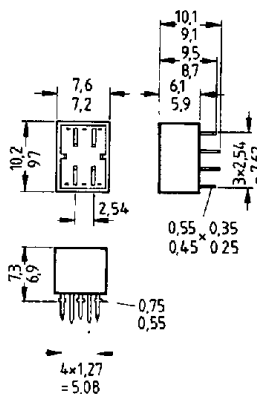
RED HD1075R/1077R
SUPER-RED HD1075O/1077O
YELLOW HD1075Y/1077Y
GREEN HD1075G/1077G

0.28" (7 mm) SEVEN SEGMENT NUMERIC DISPLAY

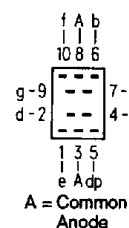
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Package Dimensions mm

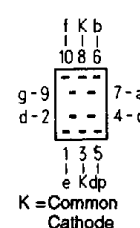


HD1075



A = Common Anode

HD1077



K = Common Cathode

FEATURES

- Rugged Encapsulated Package
- 0.28 Inch (7 mm) Digit Height
- Choice of Colors
- Common Anode or Common Cathode
- Wide Viewing
- Intensity Coded for Display Uniformity

DESCRIPTION

The HD1075X/1077X are displays with 0.28 inch (7 mm) digits with either a common anode or common cathode and a right hand decimal point.

These displays have good viewing and can be used in electronic instruments, point-of-sale systems, clocks, and other general industrial and consumer applications. All displays have a light grey face.

Contrast enhancement filters are recommended for use with all displays.

Product

HD1075R
 HD1077R
 HD1075O
 HD1077O
 HD1075Y
 HD1077Y
 HD1075G
 HD1077G

Color

Red
 Red
 Super-Red
 Super-Red
 Yellow
 Yellow
 Green
 Green

Description

Common Anode, Right Decimal
 Common Cathode, Right Decimal
 Common Anode, Right Decimal
 Common Cathode, Right Decimal
 Common Anode, Right Decimal
 Common Cathode, Right Decimal
 Common Anode, Right Decimal
 Common Cathode, Right Decimal

Maximum Ratings

Power Dissipation per Segment ¹⁾ (P_{TOT})	40 mW
Operating and Storage Temperature (T_A , T_{STO})	-40°C to +85°C
Forward Current per Segment ¹⁾ (I_F)	15 mA
Surge Forward Current per segment ¹⁾ ($I_{FS} \leq 10 \mu s$, I_{RM})	150 mA
Reverse Voltage (V_R)	6 V
Thermal Resistance (R_{THJA})	170 K/W
Junction Temperature (T_J)	100°C

Note:

¹⁾ $T_A = 45^\circ\text{C}$

See graph numbers 1, 2, 3A, 4A, 5A, 6A, 7, 8, 9, 10 on pages 25 - 27.

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

Parameter	Symbol	HD1075/7R Red	HD1075/7O Super-Red	HD1075/7Y Yellow	HD1075/7G Green	Unit
Wavelength at Peak						
Emission ($I_F=10\text{ mA}$)	λ_{PEAK}	660	635	586	565	nm
Dominant Wavelength	λ_{DOM}	645	628	590	567	nm
Spectral Bandwidth @ 50% I_V ($I_F=10\text{ mA}$)	$\Delta\lambda$	35	45	45	25	nm
Forward Voltage ($I_F=10\text{ mA}$)	V_F	1.6 (≤ 2.0)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	V
Reverse Current per Segment ($V_R=6\text{ V}$)	I_R	0.01 (≤ 10)	0.01 (≤ 10)	0.01 (≤ 10)	0.01 (≤ 10)	μA
Capacitance per Segment ($V_R=0\text{ V}$, $f=1\text{ MHz}$)	C_0	25	12	10	15	pF
Rise Time (typ.)	t_r	120	300	300	450	ns
Fall Time (typ.)	t_f	50	150	150	200	ns
Luminous Intensity per Segment ¹⁾ ($I_F=10\text{ mA}$)	μcd	450	1800	600	900	μcd

Note:

1 Deviation of the absolute values within one digit $\frac{I_{V\text{MAX}}}{I_{V\text{MIN}}} \leq 2$

Num. Displays
Bar Graphs
Light Bars