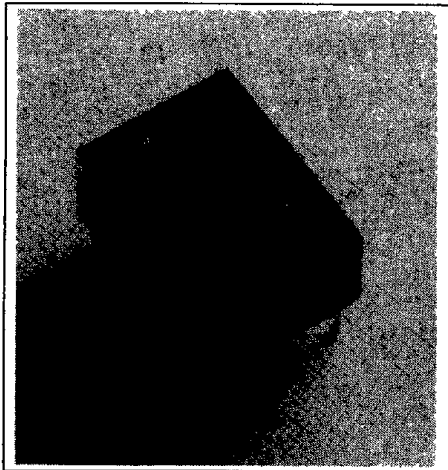


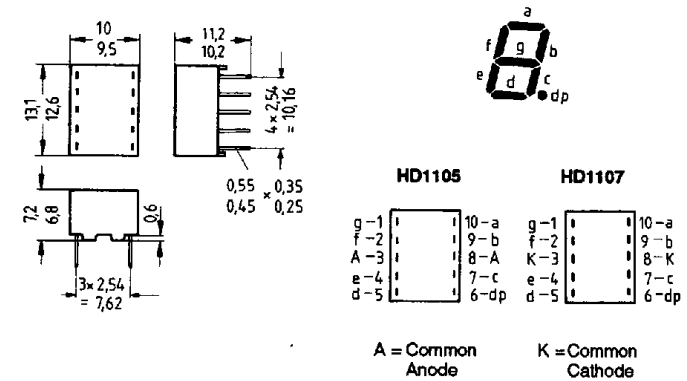
SIEMENS

RED HD1105R/1107R
 SUPER-RED HD1105O/1107O
 YELLOW HD1105Y/1107Y
 GREEN HD1105G/1107G

0.39" (10 mm) SEVEN SEGMENT NUMERIC DISPLAY



Package Dimensions mm

**FEATURES**

- Rugged Encapsulated Package
- Large 0.39 Inch (10 mm) Digit Height
- Choice of Colors
- Common Anode or Common Cathode
- Wide Viewing
- Intensity Coded for Display Uniformity

DESCRIPTION

The HD1105X/1107X are displays with 0.39" (10 mm) digits with either a common anode or common cathode and a right hand decimal point.

These displays were designed for viewing distances of up to 10 feet 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

HD1105R
 HD1107R
 HD1105O
 HD1107O
 HD1105Y
 HD1107Y
 HD1105G
 HD1107G

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})	50 mW
Operating and Storage Temperature (T _A , T _{STG})	-40°C to +85°C
Forward Current per Segment ¹⁾ (I _F)	17.5 mA
Peak Forward Current ¹⁾ (I _p ≤ 10 μs, I _{RM})	150 mA
Reverse Voltage (V _R)	6 V
Thermal Resistance (R _{θJA})	135 K/W
Junction Temperature (T _J)	100°C

Note:

¹⁾ T_A = 45°C

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

T-41-33

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

Parameter	Symbol	HD1105/7R Red	HD1105/7O Super-Red	HD1105/7Y Yellow	HD1105/7G 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_F ($I_F = 10\text{ mA}$)	$\Delta\lambda$	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_O	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	600	2300	900	1200	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