EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDS-316-002 REV: 1.1

0.36" Single Digit Displays

MODEL NO : ELS-316HWB ECN : Page: 1/5

Features :

- Industrial standard size.
- Low power consumption.
- Categorized for luminous intensity.

Applications:

- Audio equipment
- Instrument panels
- Digital read out display

Descriptions :

- The ELS-316 series is a large 9.14mm (0.36")high seven segment display designed for viewing distances up to 7 meters.
- These displays provide excellent reliability in bright ambient light .
- These devices are made with white segments and black surface.

PART NO	Chip	
	Material	Emitted Color
ELS-316HWB	GaP	Bright Red

OFFICE : NO. 25,Lane 76,Sec.3, Chung Yang Rd., Tucheng 236, Taipei, Taiwan, R.O.C.
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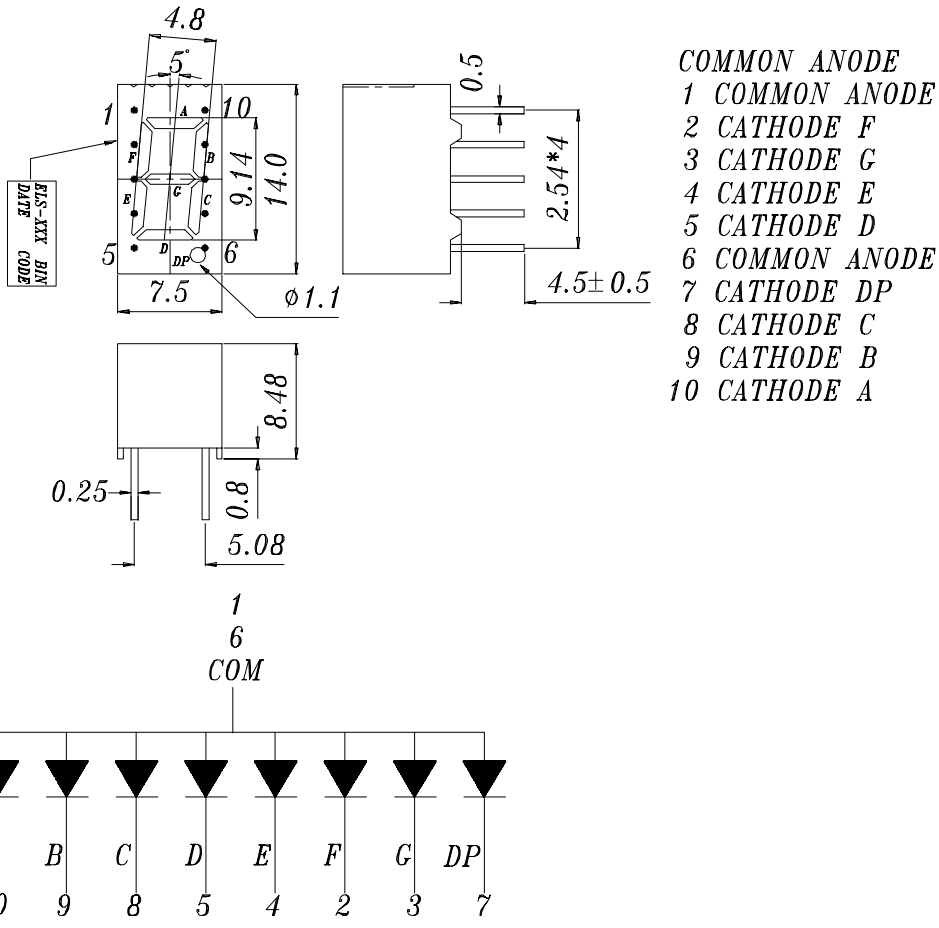
0.36" Single Digit Displays

MODEL NO : ELS-316HWB ECN : Page: 2/5

■ Package Dimensions:



COMMON ANODE
1 COMMON ANODE
2 CATHODE F
3 CATHODE G
4 CATHODE E
5 CATHODE D
6 COMMON ANODE
7 CATHODE DP
8 CATHODE C
9 CATHODE B
10 CATHODE A

■ Notes:

1.All dimensions are in millimeters , tolerance is 0.25mm unless otherwise noted.

2.Above specification may be changed without notice.
Supplier will reserve authority on material change for above specification.

0.36" Single Digit Displays

MODEL NO : ELS-316HWB ECN : Page: 3/5

■ Absolute maximum ratings at Ta = 25℃ :

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	15	mA
Operating Temperature	Topr	-40 to +85	℃
Storage Temperature	Tstg	-40 to +100	℃
Soldering Temperature	Tsol	260 ± 5	℃
Power Dissipation	Pd	45	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	50	mA

■ Electronic optical characteristics :

Parameter		Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Per segment	Iv	0.11	0.30	----	mcd	If=10mA
	Per decimal point		0.05	0.10	----		If=10mA
Peak Wavelength		λ p	----	697	----	nm	If=10mA
Dominant Wavelength		λ d	----	650	----	nm	If=10mA
Spectrum Radiation Bandwidth		△ λ	----	90	----	nm	If=10mA
Forward Voltage		Vf	1.5	2.0	2.4	V	If=10mA
Reverse Current		Ir	----	----	10	μA	Vr=5V

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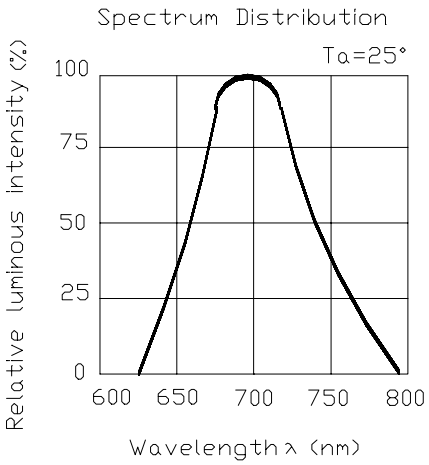
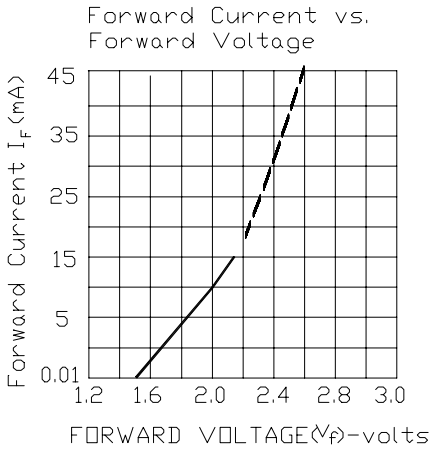
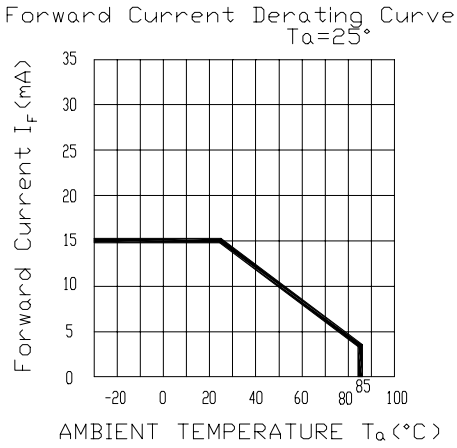
■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260℃ ± 5 ℃	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85℃ 30min ∫ 5 min L : -55℃ 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	H : +100℃ 5min ∫ 10 sec L : -10℃ 5min	50 CYCLE	76 PCS	0/1
4	High Temperature Storage	TEMP : 100℃	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55℃	1000 HRS	76 PCS	0/1
6	DC Operating Life	If = 10 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85℃/85% RH	1000 HRS	76 PCS	0/1

0.36" Single Digit Displays

MODEL NO: ELS-316HWB ECN : Page: 5/5

Typical Electro-Optical Characteristic Curves: