



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDS-801-003 REV: 1.0

0.8" Single Digit Display

MODEL NO : ELS-801IDR ECN : Page: 1/5

■ Features :

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

■ Applications:

- Audio equipment
- Instrument panels
- Digital readout display

■ Description :

- The ELS-801series is a large 20.3mm (0.8")high seven segment display design for viewing distances up to 7 meters.
- These displays provide excellent reliability in bright ambient light .
- These device is made with red segments and red surface.

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELS-801IDR	GaAsP/GaP	Hi-Eff Red	C.C.

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

TEL : 886-2-2267-2000,2267-9936

FAX : 886-2-2267-6244,22676189,22676306

<http://www.everlight.com>

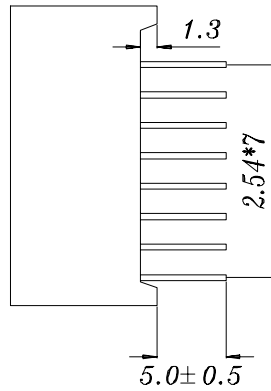
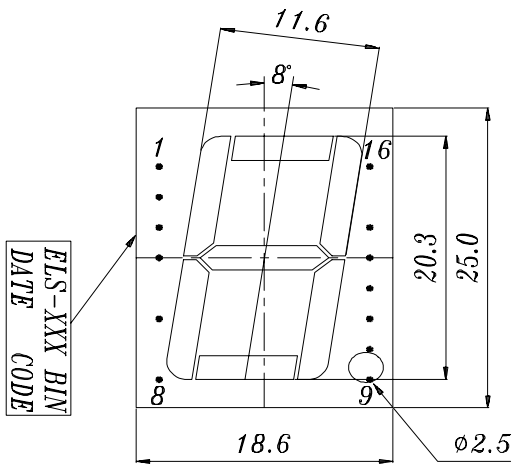
TS99072 B991918



0.8" Single Digit Display

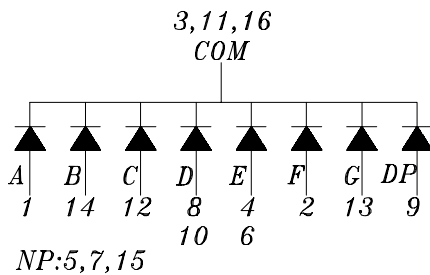
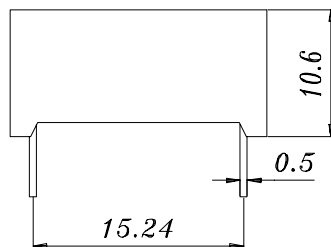
MODEL NO : ELS-801IDRECN : Page: 2/5

Package Dimension:



COMMON CATHODE

- 1 ANODE A
- 2 ANODE F
- 3 COMMON CATHODE
- 4 ANODE E
- 5 NO PIN
- 6 ANODE E
- 7 NO PIN
- 8 ANODE D
- 9 ANODE DP
- 10 ANODE D
- 11 COMMON CATHODE
- 12 ANODE C
- 13 ANODE G
- 14 ANODE B
- 15 NO PIN
- 16 COMMON CATHODE



NOTES:

1. All dimensions are 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.



0.8" Single Digit Display

MODEL NO : ELS-801IDR ECN : Page: 3/5**■ Absolute maximum ratings at Ta = 25℃ :**

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	30	mA
Operating Temperature	Topr	-40 to +85	℃
Storage Temperature	Tstg	-40 to +100	℃
Soldering Temperature	Tsol	260 ± 5	℃
Power Dissipation	Pd	100	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	160	mA

■ Electronic optical characteristics :

Parameter		Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Per segment	Iv	0.75	1.05	----	mcd	If=10mA
	Per decimal point		0.28	0.45	----		
Peak Wavelength		λ_p	----	635	----	nm	If=20mA
Dominant Wavelength		λ_d	----	625	----	nm	If=20mA
Spectrum Radiation Bandwidth		$\triangle \lambda$	----	45	----	nm	If=20mA
Forward Voltage		Vf	1.7	2.0	2.6	V	If=20mA
Reverse Current		Ir	----	----	10	μA	Vr=5V

TS99072 B991918



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDS-801-003 REV: 1.0

0.8" Single Digit Display

MODEL NO : ELS-801IDR ECN : Page: 4/5

■ Reliability test item and condition:					
NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	50 CYCLE	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	If = 20 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1

TS99072 B991918



0.8" Single Digit Display

MODEL NO: ELS-801IDRECN :

Page:

5/5

Typical Electro-Optical Characteristic Curves:

