



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDS-180-007 REV: 1.0

1.8" Single Digit Display

MODEL NO : ELS-1805GWB 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-1805series is a large 44.8mm (1.8")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 white segments and black surface.

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELS-1805GWB	GaP	Green	C.C.

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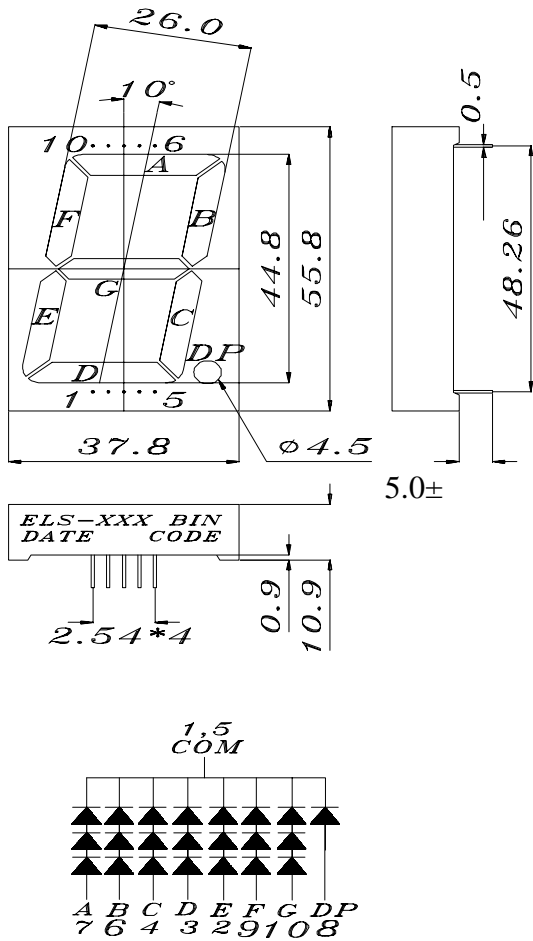


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Package Dimension:



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

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.

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Absolute maximum ratings at Ta = 25°C :

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	30	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Power Dissipation	Pd	300	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	5.6	7.8	----	mcd	If=10mA
	Per decimal point		1.40	2.00	----		
Peak Wavelength		λp	----	565	----	nm	If=20mA
Dominant Wavelength		λd	----	570	----	nm	If=20mA
Spectrum Radiation Bandwidth		$\Delta \lambda$	----	30	----	nm	If=20mA
Forward Voltage	Per segment	Vf	5.1	6.3	7.2	V	If=20mA
	Per decimal point		1.7	2.1	2.4		
Reverse Current		Ir	----	----	10	μA	Vr=5V



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■ 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



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Typical Electro-Optical Characteristic Curves:

