



EVERLIGHT ELECTRONICS CO., LTD.

Device Number : DDS-101-010 REV: 1.0

1.0" Single Digit Display

MODEL NO : ELS-1001EWA ECN : Page: 1/4

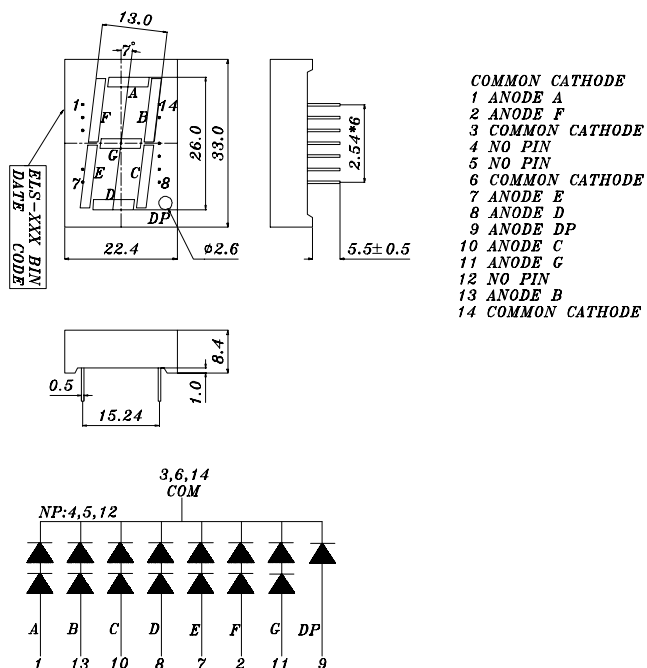
■ Features :

- Industrial Standard Size.
- Low Power Consumption.
- Categorized For Luminous Intensity.

■ Description :

- The ELS-1001 series is a large 26.0mm (1.0") 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 gray surface.

■ Package Dimension:



■ Applications:

- Audio Equipment
- Instrument Panels
- Digital Readout Display

■ NOTES:

1. All dimensions are millimeters (inch), 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.

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELS-1001EWA	GaAsP/GaP	Orange	C.C.

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E109-S1001EWA.XLS



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■ Absolute Maximum Ratings at Ta = 25°C :

Parameter	Symbol	Rating	Unit
Forward Current	If	30	mA
Operating Temperature	Topr	-40 to +85	°C
Soldering Temperature	Tsol	260 ± 5	°C
Power Dissipation	Pd	200	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	2.8	4.0	----	mcd	If=10mA
	Per decimal point		2.0	2.5	----		
Peak Wavelength		λp	----	635	----	nm	If=20mA
Dominant Wavelength		λd	----	625	----	nm	If=20mA
Spectrum Radiation Bandwidth		△λ	----	45	----	nm	If=20mA
Forward Voltage	Per segment	Vf	3.4	4.0	4.8	V	If=20mA
	Per decimal point		1.7	2.0	2.4		
Reverse Current		Ir	----	----	10	μA	Vr = 5V

■ Specifications for Bin Grading :

Bin Grading	MIN.	TYP.	MAX.	Unit
M	2.8	----	4.5	mcd
N	4.0	----	6.4	mcd
P	5.6	----	8.9	mcd
Q	7.8	----	12.5	mcd



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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:

