

Technical Data Sheet

0.52" Single Digit Displays

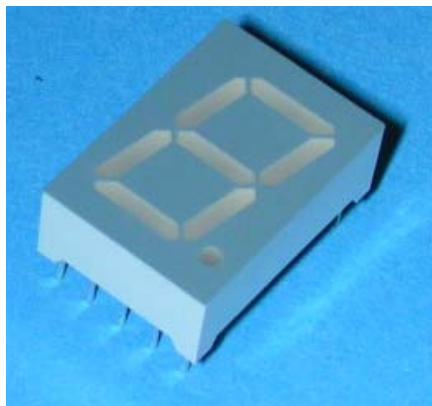
ELS-515EWA

■ Features :

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

■ Descriptions :

- The ELS-515 series is a large 13.2 mm (0.52")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 gray surface.



■ Applications :

- Audio equipment
- Instrument panels
- Digital read out display

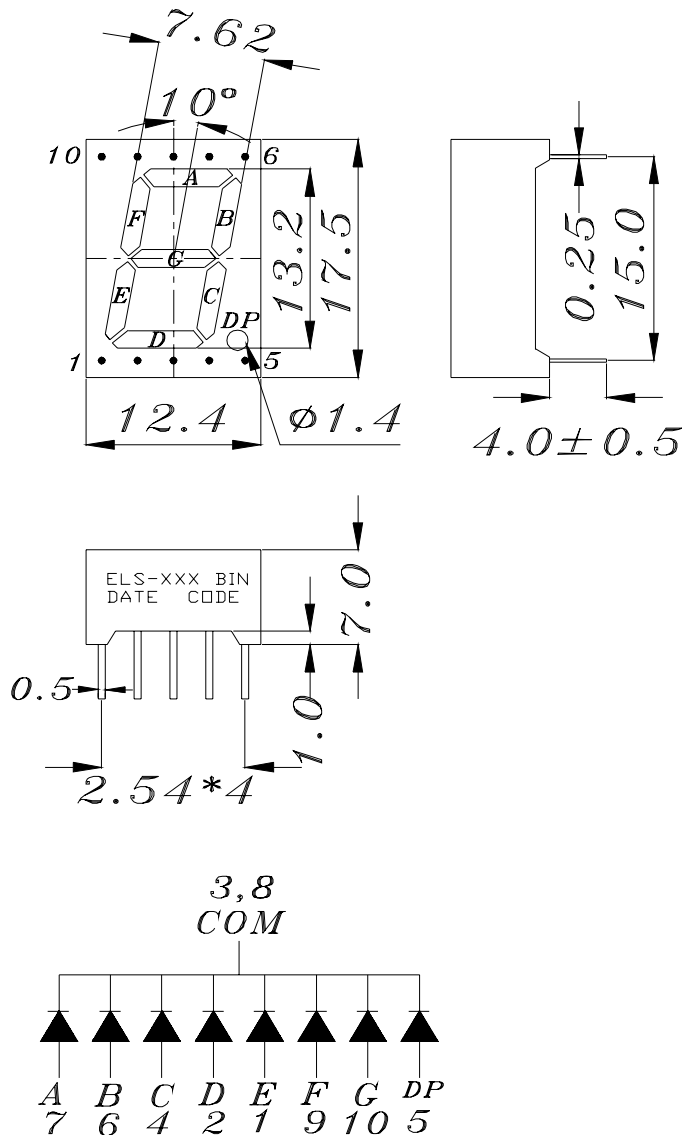
PART NO.	Chip	
	Material	Emitted Color
ELS-515EWA	GaAsP/GaP	Orange

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ELS-515EWA

Package Dimensions



COMMON CATHODE

1 *ANODE E*

2 *ANODE D*

3 *COMMON CATHODE*

4 *ANODE C*

5 *ANODE DP*

6 *ANODE B*

7 *ANODE A*

8 *COMMON CATHODE*

9 *ANODE F*

10 *ANODE G*

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.



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■ Absolute maximum ratings at Ta = 25

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	30	mA
Operating Temperature	T _{opr}	-40 to +85	
Storage Temperature	T _{stg}	-40 to +100	
Soldering Temperature	T _{sol}	260 ± 5	
Power Dissipation	P _d	100	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	I _F (Peak)	160	mA

■ Electronic optical characteristics :

Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Per segment	I _v	1.05	2.00	----	mcd	I _F =10mA
	Per decimal point		0.28	0.45	----		
Peak Wavelength		λ _p	----	635	----	nm	I _F =20mA
Dominant Wavelength		λ _d	----	625	----	nm	I _F =20mA
Spectrum Radiation	Bandwidth	λ	----	45	----	nm	I _F =20mA
Forward Voltage		V _F	1.7	2.0	2.4	V	I _F =20mA
Reverse Current		I _R	----	----	10	μA	V _R =5V

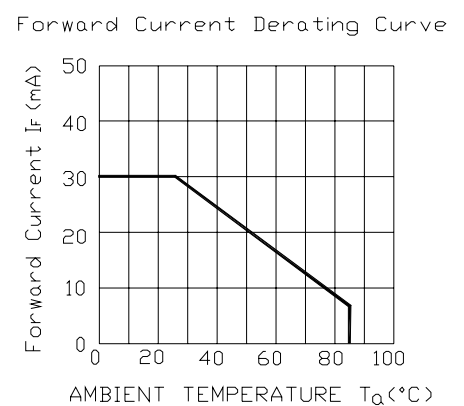
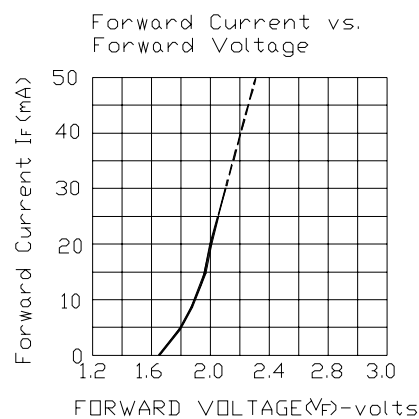
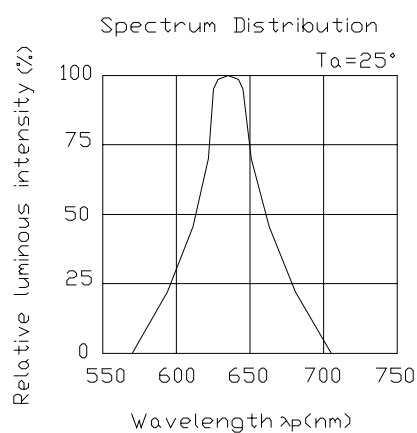


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Typical Electro-Optical Characteristic Curves:

CHIP Material:GaAsP/GaP
Emitted Color:Hi-Eff Red/Orange



**Technical Data Sheet**
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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