



Technical Data Sheet

0.56" Quadruple Digit Displays

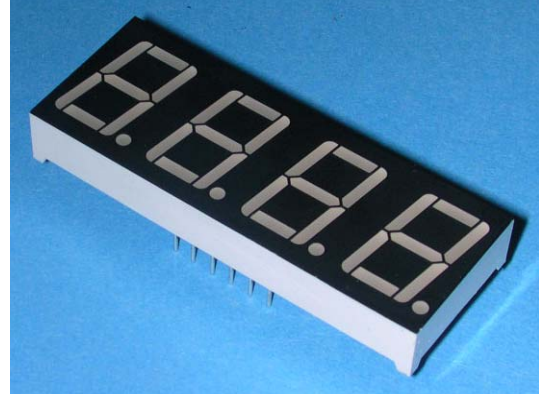
ELF-512SURWB/S530-A2

■ Features :

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

■ Descriptions :

- The ELF-512 series is a large 14.22mm (0.56")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.



■ Applications :

- Audio equipment
- Instrument panels
- Digital read out display

PART NO.	Chip	
	Material	Emitted Color
ELF-512SURWB/S530-A2	AlGaInP	Hyper Red

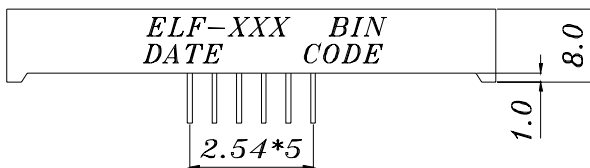
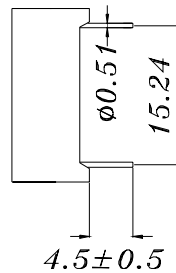
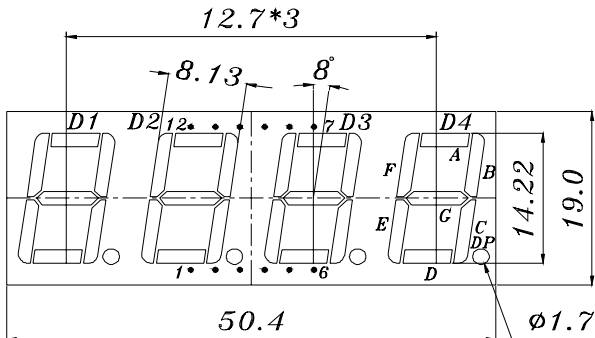


EVERLIGHT ELECTRONICS CO.,LTD.

Technical Data Sheet 0.56" Quadruple Digit Displays

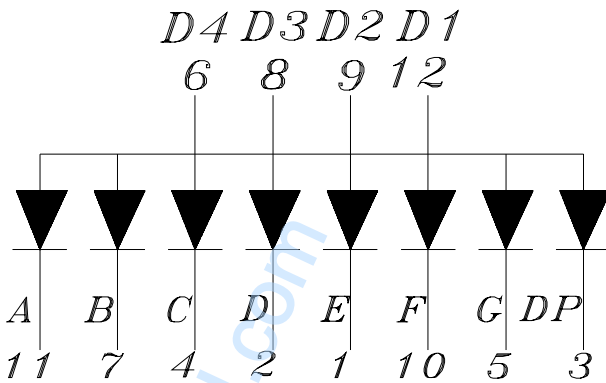
ELF-512SURWB/S530-A2

Package Dimensions



COMMON ANODE

1. CATHODE E
2. CATHODE D
3. CATHODE DP
4. CATHODE C
5. CATHODE G
6. COMMON ANODE D4
7. CATHODE B
8. COMMON ANODE D3
9. COMMON ANODE D2
10. CATHODE F
11. CATHODE A
12. COMMON ANODE D1



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.


Technical Data Sheet
0.56" Quadruple Digit Displays
ELF-512SURWB/S530-A2
■ Absolute maximum ratings at Ta = 25°C :

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	25	mA
Operating Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40 to +100	°C
Soldering Temperature	T _{sol}	260 ± 5	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	P _d	60	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	----	2.5	----	mcd	I _F =2mA
			5.60	12.5	----		I _F =10mA
	Per decimal point		----	0.6	----	mcd	I _F =10mA
			1.2	2.3	----		
Peak Wavelength		λ _p	----	632	----	nm	I _F =20mA
Dominant Wavelength		λ _d	----	624	----	nm	I _F =20mA
Spectrum Radiation Bandwidth		Δλ	----	20	----	nm	I _F =20mA
Forward Voltage		V _F	----	2.0	2.4	V	I _F =20mA
Reverse Current		I _R	----	----	100	μA	V _R =5V



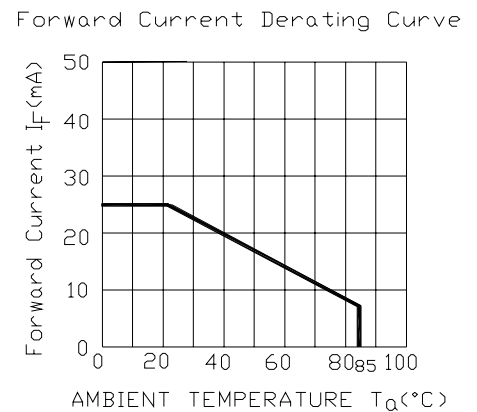
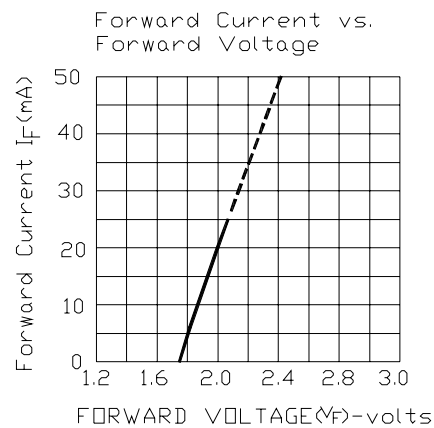
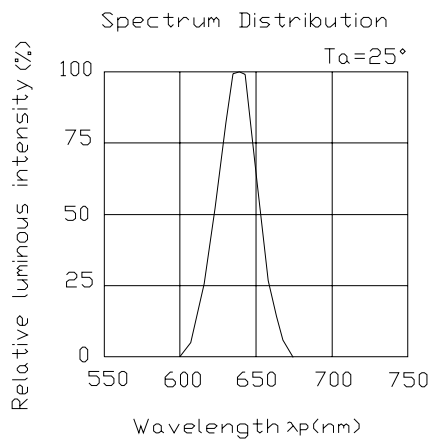
Technical Data Sheet

0.56" Quadruple Digit Displays

ELF-512SURWB/S530-A2

■ Typical Electro-Optical Characteristic Curves:

(SUR)




Technical Data Sheet
0.56" Quadruple Digit Displays
ELF-512SURWB/S530-A2
Reliability test items and conditions:

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 = 10 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1