



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDT-512-026 REV: 1

0.56" Triple Digit Displays

PART NO. : ELT-512SURWA/S530-A3 ECN : Page: 1/5

■ Features :

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

■ Applications:

- Audio equipment
- Instrument panels
- Digital read out display

■ Descriptions :

- The ELT-512 series is a large 14.22 mm
(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 gray surface.

PART NO.	Chip	
	Material	Emitted Color
ELT-512SURWA/S530-A3	AlGaInP	Hyper Red

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>

T02081 B91560069



REV: 1

ECN : Page: 2/5

Diagram of a 3-to-8 decoder circuit. The inputs are $D3$, $D2$, and $D1$, with values 8, 9, and 12 respectively. The decoder has eight outputs labeled A through DP . The outputs are connected to a common bus labeled $NC:6$. The output values are 11, 7, 4, 2, 1, 10, 5, and 3 respectively.

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.



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDT-512-026 REV: 1

0.56" Triple Digit Displays

PART NO. : ELT-512SURWA/S530-A3 ECN : Page: 3/5

■ Absolute maximum ratings at Ta = 25°C :

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	25	mA
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	60	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	I _v	2.5	4.5	----	mcd	IF=2mA
			11.0	24.0	----		IF=10mA
	Per decimal point		0.7	1.5	----	mcd	IF=2mA
			3.5	7.5	----		IF=10mA
Peak Wavelength		λ _p	----	632	----	nm	IF=20mA
Dominant Wavelength		λ _d	----	624	----	nm	IF=20mA
Spectrum Radiation	Bandwidth	△ λ	----	20	----	nm	IF=20mA
Forward Voltage		V _F	----	2.0	2.4	V	IF=20mA
Reverse Current		I _R	----	----	10	μ A	V _R =5V



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDT-512-026

REV: 1

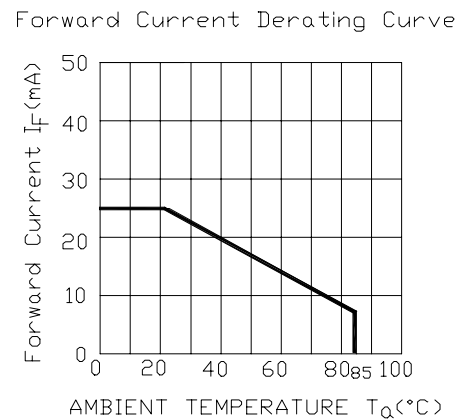
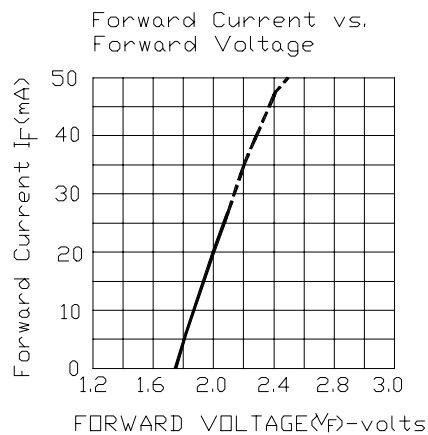
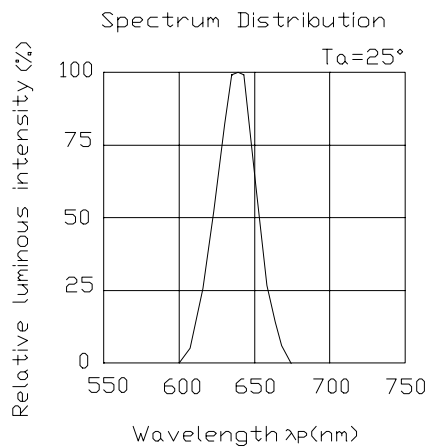
0.56" Triple Digit Displays

PART NO. : ELT-512SURWA/S530-A3 ECN :

Page: 4/5

■ Typical Electro-Optical Characteristic Curves:

(SUR)





EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDT-512-026

REV: 1

0.56" Triple Digit Displays

PART NO. : ELT-512SURWA/S530-A3

ECN :

Page: 5/5

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