

# Technical Data Sheet 0.56" Triple Digit Displays

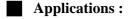
### **ELT-512SURWA/S530-A3**

#### Features:

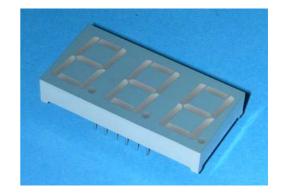
- Industrial standard size.
- Low power consumption.
- Categorized for luminous intensity.
- Pb free

#### **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.



- Audio equipment
- Instrument panels
- Digital read out display



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

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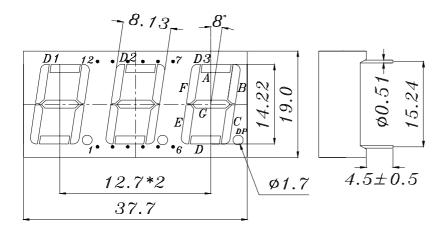
Device Number: CDDT-512-026 Prepared date: 2004/06/30 Prepared by: Yanfang Gao

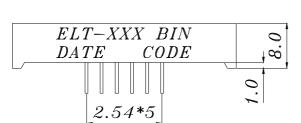


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## **ELT-512SURWA/S530-A3**

#### **Package Dimensions**





COMMON ANODE

1 CATHODE E

2 CATHODE D

2 CATHODE D

3 CATHODE DF

4 CATHODE C 5 CATHODE G

6 NO CONNECT

7 CATHODE B

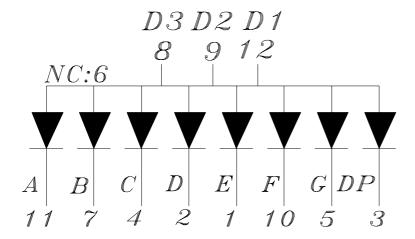
8 COMMON ANODE D3

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.

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## **ELT-512SURWA/S530-A3**

## ■ Absolute maximum ratings at $Ta = 25^{\circ}C$ :

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	25	mA
Operating Temperature	Operating Temperature Topr -40 to +85		$^{\circ}\!\mathbb{C}$
Storage Temperature	Tstg	-40 to +100	$^{\circ}\!\mathbb{C}$
Soldering Temperature	Tsol	$260 \pm 5$	$^{\circ}\!\mathbb{C}$
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	60	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	IF(Peak)	160	mA

## ■ Electronic optical characteristics :

Pa	rameter	Symbol	Min.	Тур.	Max.	Unit	Condition
Luminous Intensity	Dar sagmant	- Iv		3.5		mcd	IF=2mA
	Per segment		7.80	17.60			IF=10mA
	Per decimal point			1.0			
			2.5	5.6			IF=10mA
Peak V	Wavelength	λр		632		nm	IF=20mA
Dominar	nt Wavelength	λd		624		nm	IF=20mA
•	m Radiation ndwidth	$\triangle \lambda$		20		nm	IF=20mA
Forwa	ard Voltage	VF		2.0	2.4	V	IF=20mA
Rever	rse Current	Ir			100	μΑ	VR=5V

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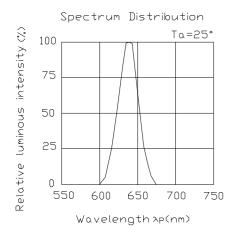


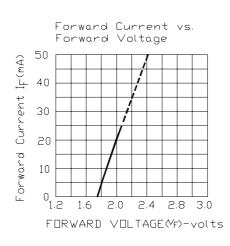
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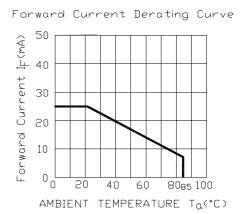
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#### Typical Electro-Optical Characteristic Curves:

# (SUR)







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## **ELT-512SURWA/S530-A3**

#### **Reliability test items and conditions:**

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : $260^{\circ}$ C ± 5 $^{\circ}$ 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 $\int$ 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

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