



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDS-105-014 REV: 1.0

1.0" Single Digit Displays

MODEL NO : ELS-1005SRWA ECN : Page: 1/5

■ Features :

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

■ Applications:

- Audio equipment
- Instrument panels
- Digital read out display

■ Description :

- The ELS-1005 series is a large 25.4mm (1.0")high seven segment display design for viewing distances up to 7 meters.
- These displays provide excellent readability in bright ambient light .
- These device is made with white segments and gray surface.

PART NO	CHIP		C.C. or C.A.
	Material	Emitted Color	
ELS-1005SRWA	GaAlAs	Super Red	C.C.

OFFICE : NO. 25,Lane 76,Sec.3, Chung Yang Rd., Tucheng 236, Taipei, Taiwan, R.O.C.

TEL : 886-2-2267-2000,2267-9936

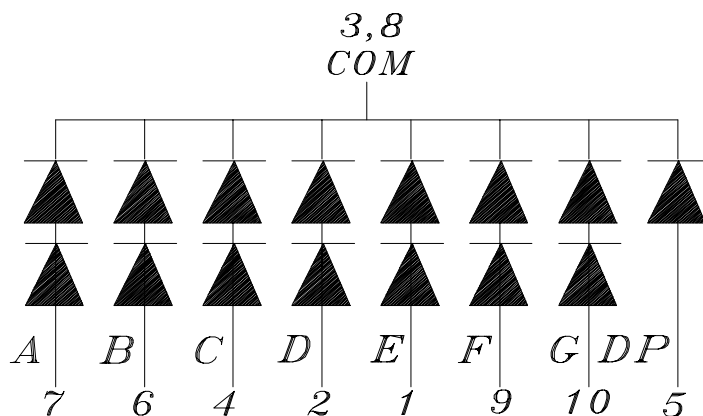
FAX : 886-2-2267-6244,22676189,22676306

<http://www.everlight.com>



REV: 1.0

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- 1.All dimensions are 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	40	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	220	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	I _f (Peak)	180	mA

■ Electronic optical characteristics :

Parameter		Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Per segment	I _v	11.00	20.0	----	mcd	If=10mA
	Per decimal point		5.60	11.00	----	mcd	If=10mA
Peak Wavelength		λ _p	----	660	----	nm	If=20mA
Dominant Wavelength		λ _d	----	643	----	nm	If=20mA
Spectrum Radiation Bandwidth		△λ	----	20	----	nm	If=20mA
Forward Voltage	Per segment	V _f	3.0	3.4	4.8	V	If=20mA
	Per decimal point		1.5	1.7	2.4	V	If=20mA
Reverse Current		I _r	----	----	10	μA	V _r =5V



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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℃ ± 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



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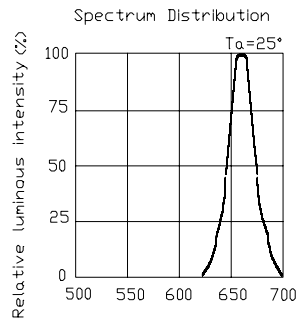
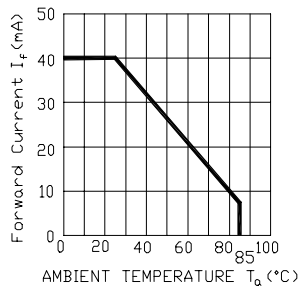
ECN :

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Typical Electro-Optical Characteristic Curves:

Forward Current Derating Curve



Per decimal point

Per segment

