EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : CDDF-512-016 REV: 1

0.56" Quadruple Digit Displays

PART NO. : ELF-512HWB 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 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.

PART NO.	Chip	
	Material	Emitted Color
ELF-512HWB	GaP	Bright Red

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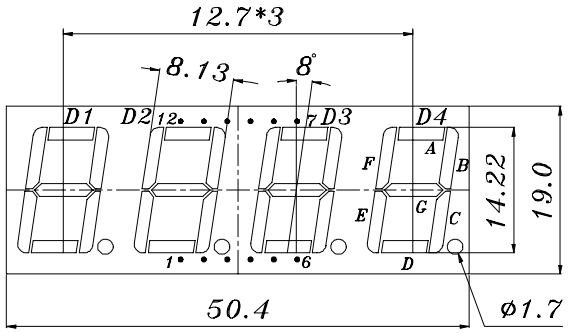
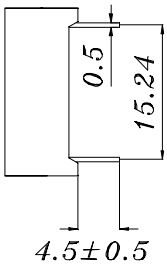
0.56" Quadruple Digit Displays

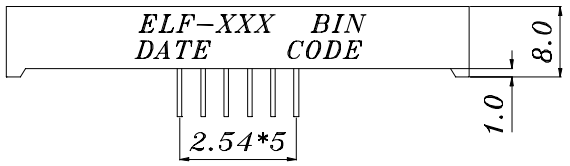
PART NO. : ELF-512HWB ECN : Page: 2/5

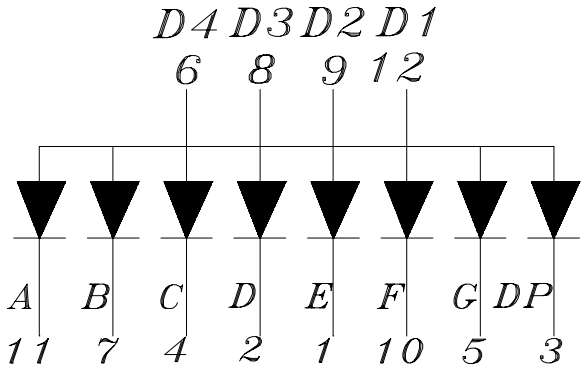
■ Package Dimensions:





COMMON ANODE
1. CATHODE E
2. CATHODE D
3. CATHODE DP
4. CATHODE C
5. CATHODE G
6. COMMODE 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.

0.56" Quadruple Digit Displays

PART NO. : ELF-512HWB ECN : Page: 3/5

■ Absolute maximum ratings at Ta = 25℃ :

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	15	mA
Operating Temperature	Topr	-40 to +85	℃
Storage Temperature	Tstg	-40 to +100	℃
Soldering Temperature	Tsol	260 ± 5	℃
Power Dissipation	Pd	45	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	I_F(Peak)	50	mA

■ Electronic optical characteristics :

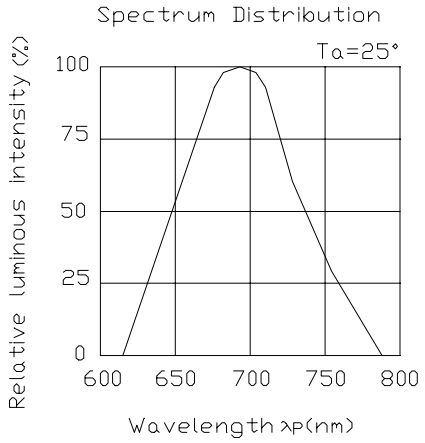
Parameter		Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Per segment	Iv	0.18	0.56	----	mcd	I_F=10mA
	Per decimal point		0.06	0.15	----		
Peak Wavelength		λ p	----	697	----	nm	I_F=10mA
Dominant Wavelength		λ d	----	650	----	nm	I_F=10mA
Spectrum Radiation Bandwidth		△ λ	----	90	----	nm	I_F=10mA
Forward Voltage		V_F	1.5	2.0	2.4	V	I_F=10mA
Reverse Current		I_R	----	----	10	μA	V_R=5V

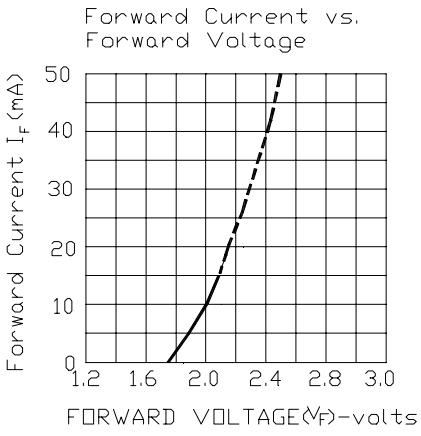
0.56" Quadruple Digit Displays

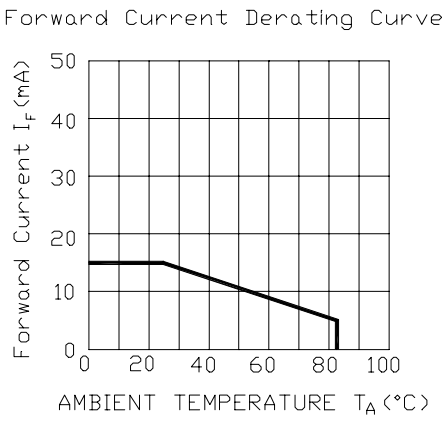
PART NO. : ELF-512HWB ECN : Page: 4/5

Typical Electro-Optical Characteristic Curves:

CHIP Material:GaP
Emitted Color:Bright Red







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PART NO. : ELF-512HWB 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℃ ± 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