



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DDM-350-006 REV: 1.0

3.5" 5*8 Dot Matrix Display

MODEL NO : ELM-3507EVGWA ECN : Page: 1/4

Features :

- Large emitting dot 0.3" diameter.
- Low power/high brightness.

Description :

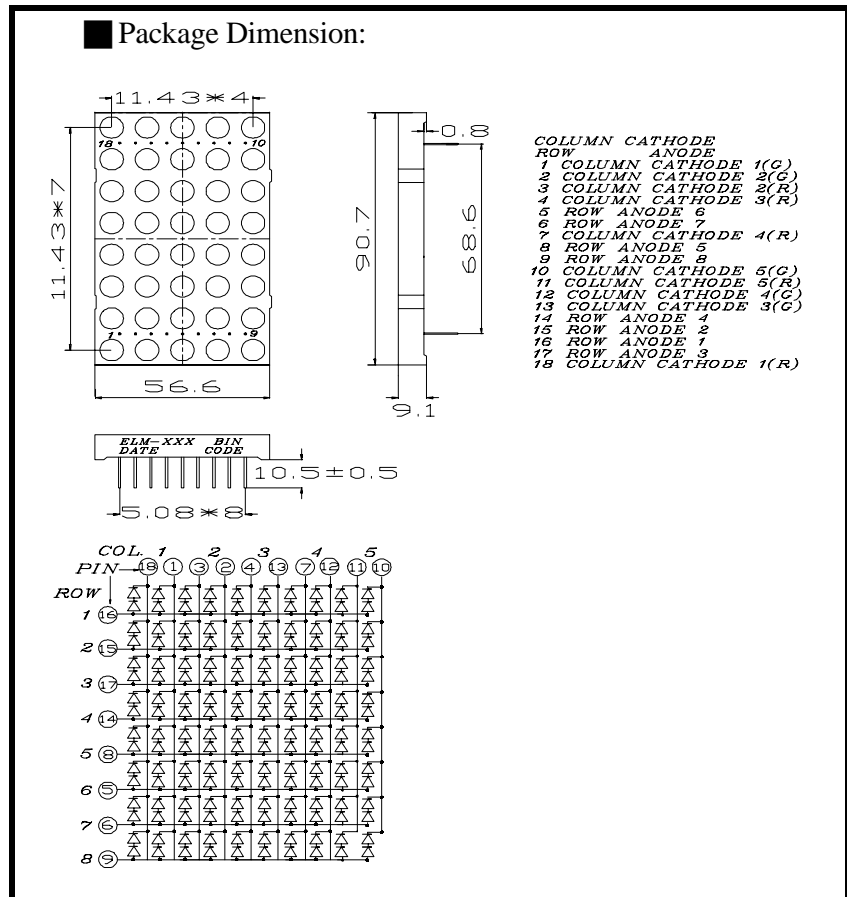
- The ELM-3507 series are a large emitting area (7.6mm diameter) LED sources configured in a 40 dots 5*8 matrix array.
- These device is made with white colored dots and grey surface.

Applications:

- Instrument panels
- Digital readout display

NOTES:

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 .



PART NO		CHIP		C.C. or C.A.
		Material	Emitted Color	
ELM-3507EVGWA	E	GaAsP/GaP	Orange	C.C.
	VG	GaP	Green	

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E106-M3507EVG.XLS

B990559 T99305



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Page:

2/4

Absolute maximum ratings at Ta = 25°C :

Parameter	Symbol		Rating	Unit
Reverse Voltage	Vr		5	V
Forward Current	If	E	30	mA
		VG	30	mA
Operating Temperature	Topr		-40 to +85	°C
Storage Temperature	Tstg		-40 to +100	°C
Soldering Temperature	Tsol		260 ± 5	°C
Power Dissipation	Pd	E	100	mW
		VG	100	mW
Peak Forward Current (Duty 1/10 @ 1KHZ)	If (Peak)	E	160	mA
		VG	160	

Electronic optical characteristics :

Parameter	Symbol		MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Iv	E	4.0	6.0	----	mcd	If=10mA
		VG	5.6	7.0	----		
Peak Wavelength	λ_p	E	----	635	----	nm	If=20mA
		VG	----	570	----		
Dominant Wavelength	λ_d	E	----	625	----	nm	If=20mA
		VG	----	571	----		
Spectrum Radiation Bandwidth	$\Delta \lambda$	E	----	45	----	nm	If=20mA
		VG	----	30	----		
Forward Voltage	Vf	E	1.7	2.0	2.6	V	If=20mA
		VG	1.7	2.1	2.4		
Reverse Current	Ir		----	----	10	μA	Vr = 5V



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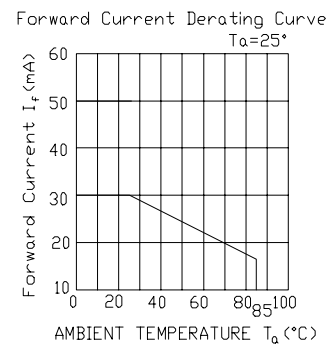
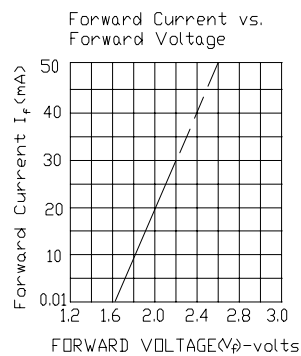
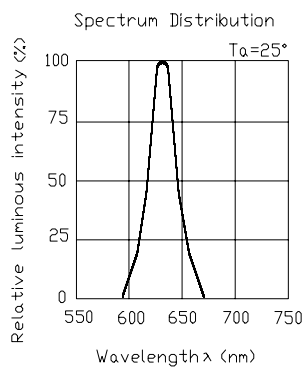
■ Reliability test item and condition:					
NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260℃ ± 5 °C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85℃ 30min └ 5 min L : -55℃ 30min	50 CYCLE	76 PCS	0/1
3	Thermal Shock	H : +100℃ 5min └ 10 sec L : -10℃ 5min	50 CYCLE	76 PCS	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 = 20 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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Typical Electro-Optical Characteristic Curves:

E



VG

