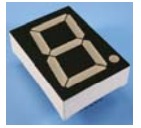


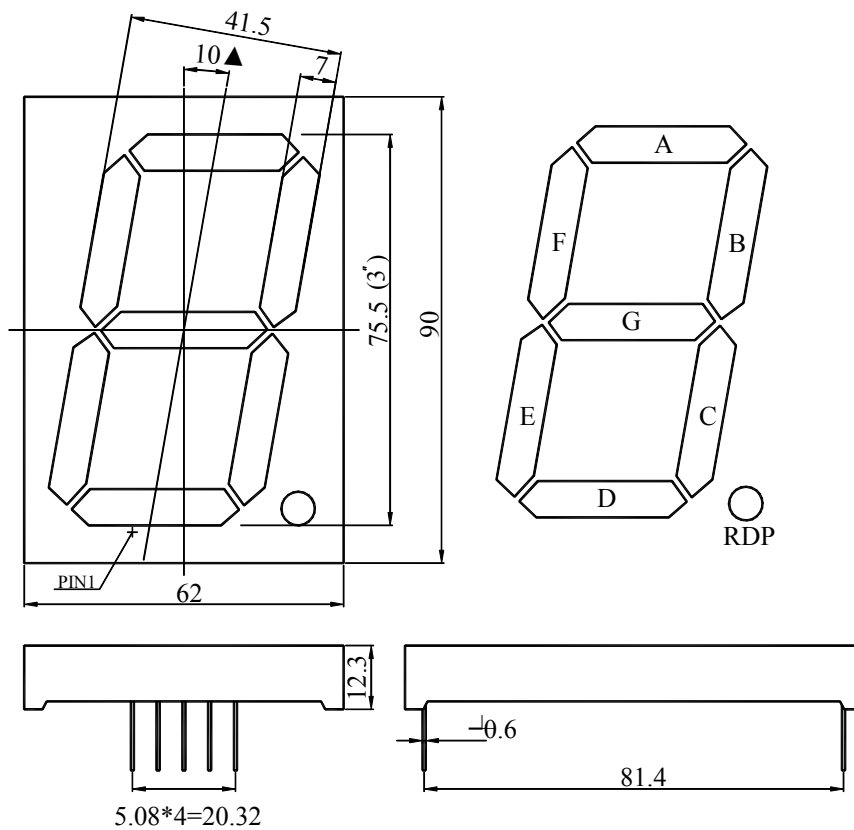
# DATA SHEET for LED DISPLAY

75.5mm(3.0") Seven Segments Single Digit



Part No.		Dice Color	
YDUR-130K(A)M-S		High Super Red	
Material	Color of Segment	Surface Color	
AlGaInP	White Diffused	Black	

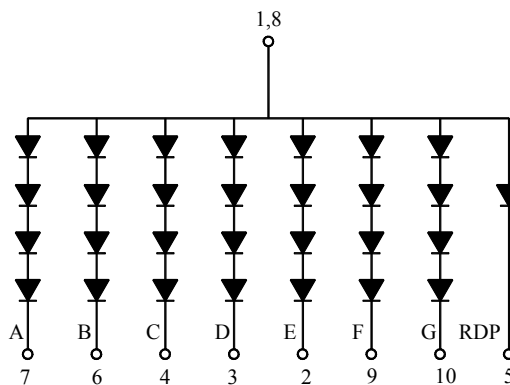
## Package Dimensions :



## Notes :

- 1) All dimensions are in millimetres (mm), Tolerance is  $\pm 0.25\text{mm}$  unless otherwise noted.
- 2) Specifications are subject to change without notice.

## Internal Circuit Diagram :



YDUR-130KM-S

YDUR-130AM-S

### Absolute Maximum Rating of Each Segment (Ta=25℃)

Parameter	Symbol	Maximum Rating	Unit
Power Dissipation/seg.	P <sub>M</sub>	220	mW
Peak Forward Current /seg. (Duty 1/10@ 1KHz)	I <sub>FP</sub>	60	mA
Continuous Forward Current/seg.	I <sub>F</sub>	20	mA
Recommend Use Current/seg. (※)	I <sub>F</sub>	5 ~ 10	mA
Reverse Voltage	V <sub>R</sub>	12	V
Operation Temperature	T <sub>opr</sub>	- 25℃ ~ 75℃	℃
Storage Temperature	T <sub>stg</sub>	- 30℃ ~ 85℃	℃
Soldering Temperature (time≤5 seconds.)	T <sub>sol</sub>	260±5	℃

Note : It is recommended that the product is driven by TTL,CMOS.

### Electron-Optical Characteristics of Each Segment (Ta=25℃)

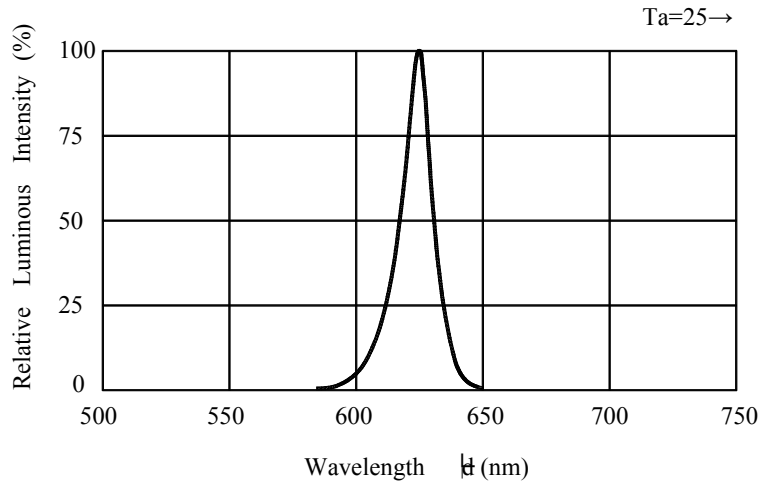
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Luminous Intensity/seg.	I <sub>v</sub>	82		mcd	I <sub>F</sub> =20mA
Forward Voltage/seg.	V <sub>F</sub>	8.0	10	V	I <sub>F</sub> =20mA
Reverse Current/seg.	I <sub>R</sub>		50	μA	V <sub>R</sub> =5V
Peak Wavelength	λ <sub>p</sub>	625		nm	I <sub>F</sub> =20mA
Spectral Line Half Width	Δλ	30		nm	I <sub>F</sub> =20mA

### Reliability Test Items and Conditions

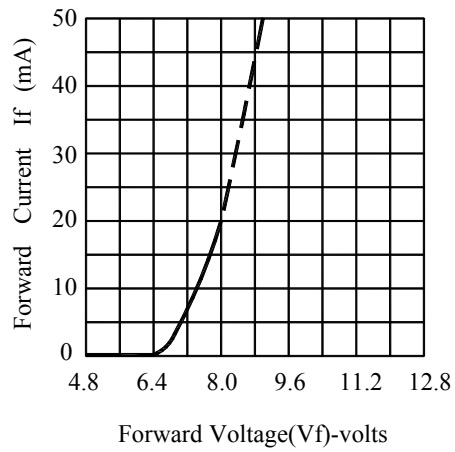
Test Item	Test Conditions	Duration	Sample	Ac/Re
Temperature Cycle	-40℃(30 min.) ~ 25℃(5 min.) ~ 100℃(30 min.) ~ 25℃(5 min.)	50 cycles	100	0/1
High Temp. Storage	Ta=100℃	1,000 hours	100	0/1
Temp. & Humidity Test	Ta=85℃, RH=85%	1,000 hours	100	0/1
Low Temp. Storage	Ta=-40℃	1,000 hours	100	0/1
Operating Life Test	Ta=25±5℃ DC I <sub>F</sub> =20mA	1,000 hours	100	0/1
Solder Heat	Tsol=260±5℃, 10s	1 time	20	0/1

## Typical Electro- Optical Characteristic Curves :

Spectrum Distribution



Forward Current vs.  
Forward Voltage



Forward Current Derating Curve

