
SPECIFICATIONS FOR LED DISPLAYS

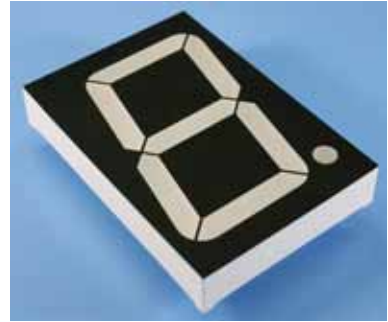
56.8mm (2.3") Seven Segments Single Digit

[LSD230□ EG-10 Series](#)

WENRUN OPTOELECTRONIC

Features:

- High efficiency, low power consumption.
- Extremely low current.
- Luminous evenly distributed on each segment.
- Low development cost.

**LSD230A/B/C/DEG-10****Descriptions:**

- Industrial standard size.
- These displays provide excellent reliability in bright ambient light.
- These devices are made with white segments and black surface.

Applications:

- Audio equipment or Instrument panels.
- General use for digital indicators.
- Multimedia product.

Selection Guide:

Part No.		Chip		Lens Color
Anode	Cathode	Material	Emitting Color	
LSD230B/DEG-10	LSD230A/CEG-10	GaAsP/GaP	Orange	White Diffused
		GaP	Green	

Absolute Maximum Rating (Ta=25)

Parameter	Symbol	Orange	Green	Unit
Power Dissipation/Segment	P _d	220	220	mW
Peak Forward Current /Segment (Duty 1/10@ 1KHz)	I _{FP}	60	60	mA
Continuous Forward Current /Segment	I _F	15	15	mA
Recommend use current /Segment	I _F	5~10	5~10	mA
Reverse Voltage /Segment	V _R	12	12	V
Operating Temperature Range	Topr	-25~ +75		
Storage Temperature Range	Tstg	-30 ~ +85		
Solder Temperature	Tsol	260 ± 5		

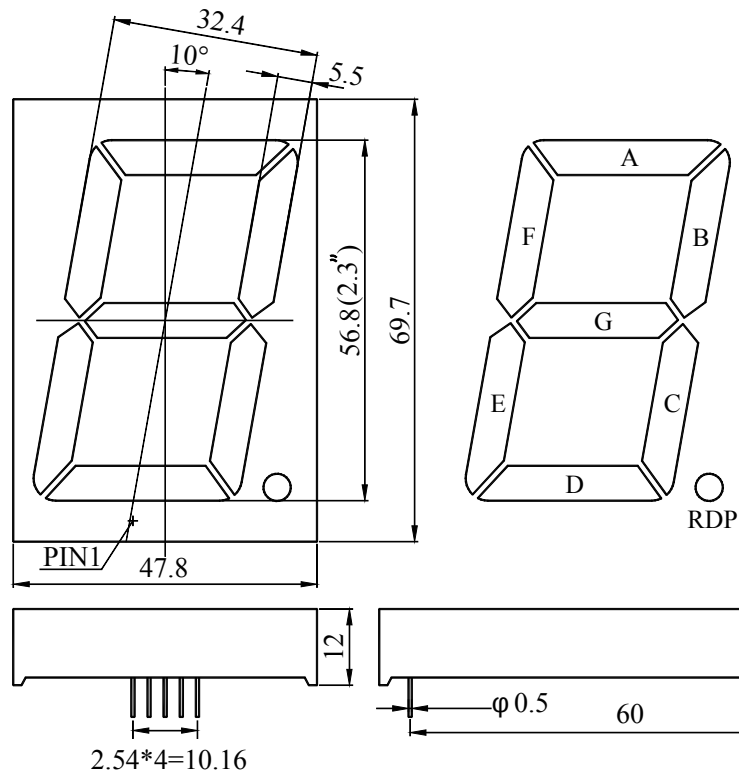
Notes : 1、 This is the limit current. It is not allowed to use when the product work continuously.

2、 It is recommended that the product is driven by TTL,CMOS .

3、 Soldering time ≤ 5 seconds.

Electrical Optical Characteristics (Ta=25)

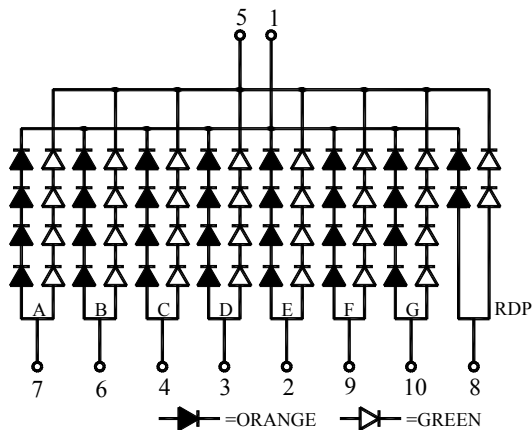
Parameter	Symbol	Device	Typ.	Max.	Unit	Test Condition
Luminous Intensity /Segment	I _v	Orange Green	14 14	-- --	mcd	I _F =10mA
Forward Voltage /Segment	V _F	Orange Green	8.0 8.8	10 10	V	I _F =20mA
Reverse Current /Segment	I _R	Orange Green	-- --	50 50	uA	V _R =5V
Dominant Wavelength	λ d	Orange Green	630 565	-- --	nm	I _F =20mA
Spectral Line Half Width	Δ λ	Orange Green	30 30	-- --	nm	I _F =20mA

Package Dimensions:**NOTES :**

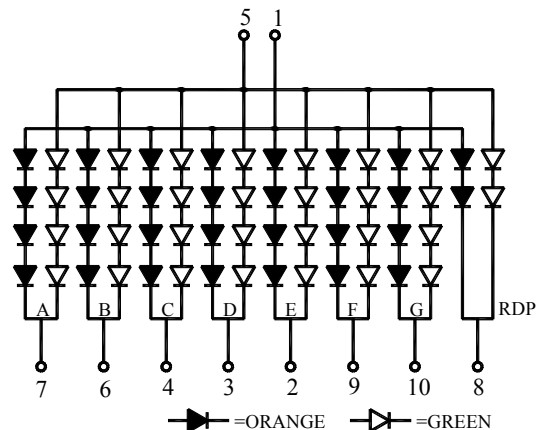
- All dimensions are in millimetres (mm), Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
- Specifications are subject to change without notice.

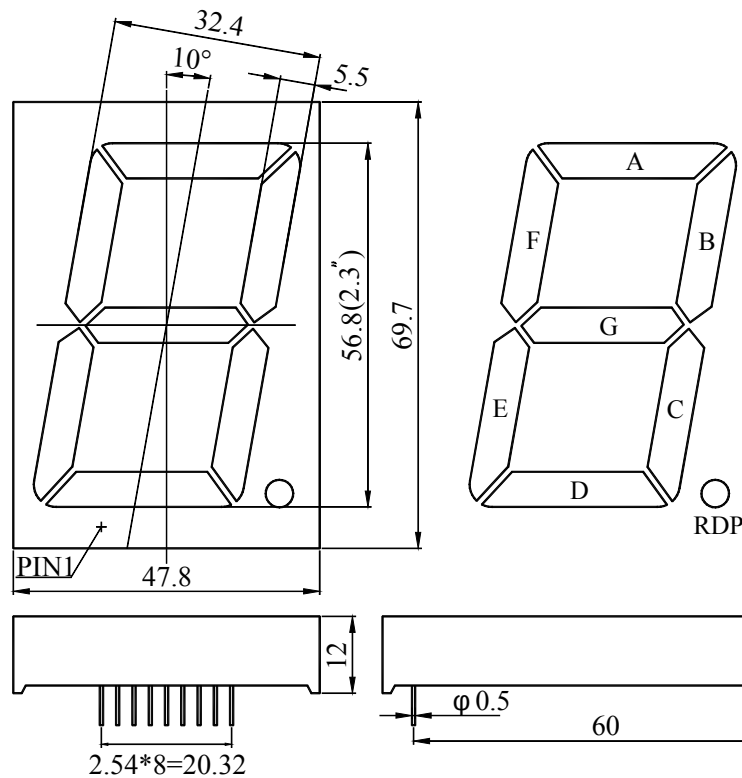
Internal Circuit:

Common Cathode

**LSD230A□□**

Common Anode

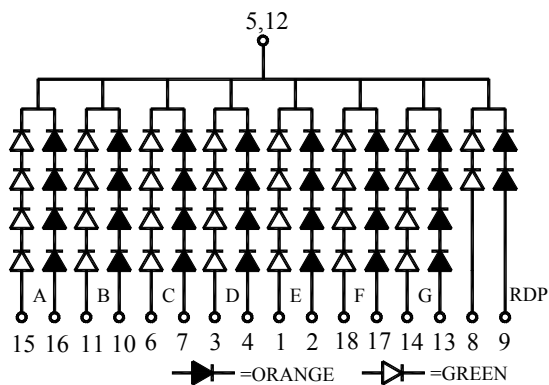
**LSD230B□□**

Package Dimensions:**NOTES :**

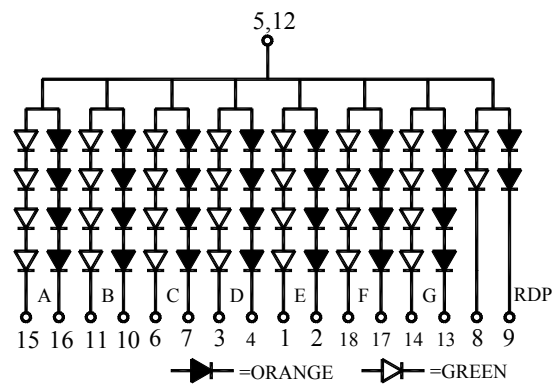
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Internal Circuit:

Common Cathode

**LSD230C□□**

Common Anode

**LSD230D□□**

Reliability Test Items and Conditions

NO	Test Item	Test Conditions	Duration	Sample	Ac/Re
1	Temperature Cycle	-30 ~ 25 ~ 85 ~ 25 30min 5min 30min 5min	50cycles	100	0/1
2	High Temp. Storage	Ta=85	1000hours	100	0/1
3	Temp.& Humidity Test	Ta=85 RH=85%	1000hours	100	0/1
4	Low Temp. Storage	Ta=-30	1000hours	100	0/1
5	Operating Life Test	Ta=25 ± 5 DC IF=15mA	1000hours	100	0/1
6	Solder Heat	Tsol=260 ± 5 , 5s	1times	20	0/1

Typical Electro-Optical Characteristics Curves

