SPECIFICATIONS FOR LED DISPLAYS

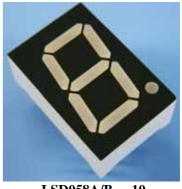
14.2mm(0.58") Seven Segments Single Digit

LSD058 -10 Series

WENRUN OPTOELECTRONIC

Features:

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



LSD058A/B -10

Descriptions:

- Industrial standard size.
- These display 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.		Ch	Lens		
Anode	Cathode	Material	Emitting Color	Color	
LSD058BSR-10	LSD058ASR-10	GaAlAs	Super Red	White Diffused	
LSD058BG-10	LSD058AG-10	GaP	Green		
LSD058BE-10	LSD058AE-10	GaAsP/GaP	Orange		

Absolute Maximum Rating (Ta=25)

Parameter	Symbol	Super Red	Green	Orange	Unit
Power Dissipation/Segment	P_d	50	60	60	mW
Peak Forward Current /Segment (Duty 1/10@ 1KHz)	I_{FP}	70	70	70	mA
Continuous Forward Current /Segment	I_{F}	20	20	20	mA
Recommend use current /Segment	I_{F}	5~10	5~10	5~10	mA
Reverse Voltage /Segment	V_R	5	5	5	V
Operating Temperature Range	Topr	-25~ +75			
Storage Temperature Range	nge Tstg $-30 \sim +85$				
Solder Temperature	Tsol		260 ± 5		

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

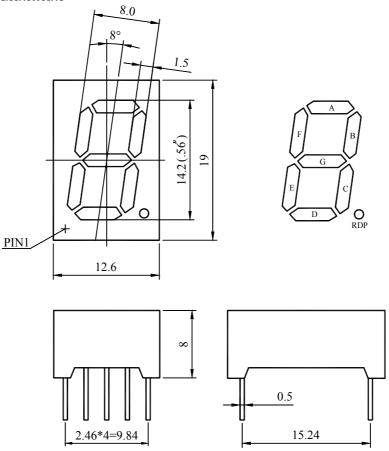
- 2、 It is recommended that the product is driven by TTL,CMOS.
- 3, Soldering time 5 seconds.

Electrical Optical Characteristics (Ta=25)

Parameter	Crumb al	Super Red		Green		Orange		TI-n:4	Test	
Parameter	Symbol	Тур.	Max.	Тур.	Max.	Тур.	Max.	Unit	Condition	
Luminous Intensity	$I_{ m V}$	0.0		4.5		4.5	1	mcd	I _F =10mA	
/Segment		9.0								
Forward Voltage	V_{F}	3.7	1.05	2.2	2.2	2.5	2.0	2.5	V	I -20 A
/Segment		1.85	2.3	2.2	2.5	2.0	2.5	V	I _F =20mA	
Reverse Current	I_R		50	1	50		50	uA	V _R =5V	
/Segment										
Dominant	d	a		645 565 630			I _F =20mA			
Wavelength		d 043		363		030		nm	1ŗ−∠UIIIA	
Spectral Line Half			30		30		30			I _F =20mA
Width		30		30		30	-	nm	IF−∠UIIIA	

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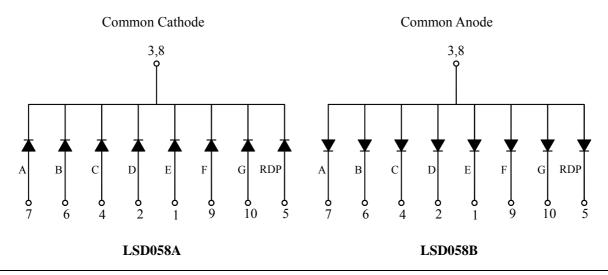
Package Dimensions:



NOTES:

- All dimensions are in millimetres (mm), Tolerance is ± 0.25 mm unless otherwise noted.
- Specifications are subject to change without notice.

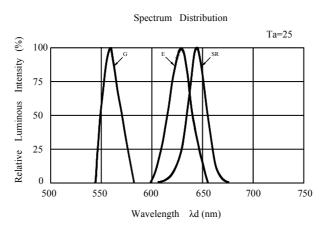
Internal Circuit:

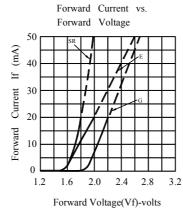


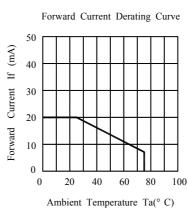
Reliability Test Items and Conditions

NO	Test Item	Test Conditions	Duration	Sample	Ac/Re
1	Temperature Cycle	-30 ~25 ~85 ~25 30min 5min 30min 5min	50clycles	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







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