

## LD5011A/B Series - 0.50 inch Single Digit 7 Segment LED Display



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES



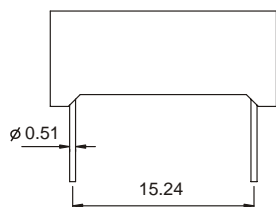
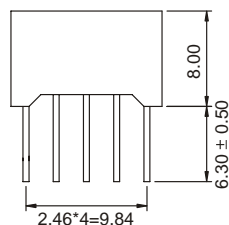
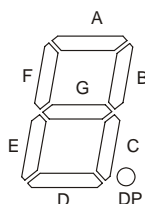
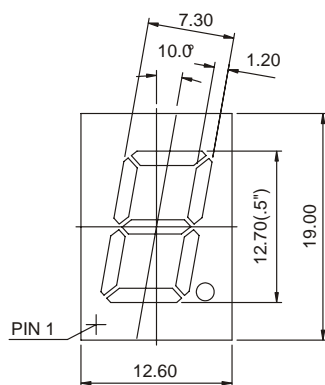
### Features

- 12.70 mm (0.50 inch) digit high
- Excellent digit appearance
- Wide viewing angle
- Range of emitted colors
- I.C. compatible
- Low power consumption
- White segment
- RoHS compliant

### Available options

- Alternative emitting luminosity:  
Standard or high brightness version
- Alternative emitted color
- Alternative segment color
- Alternative font
- Common Cathode is available
- Cropped terminal pins

### Package Dimensions



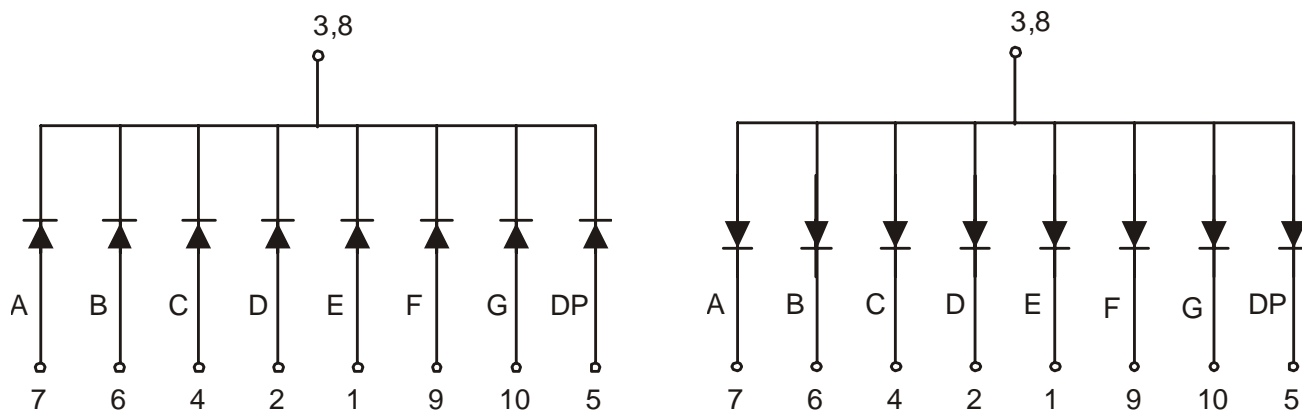
#### Notes:

1. All dimensions are in millimeters(inches), Tolerance is  $\pm 0.25\text{mm}(0.01\text{inch})$  unless other wise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

## Internal Circuit Diagram

LD5011A (Common Cathode)

LD5011B (Common Anode)



## Selection Guide

Single Digit 7 Segment LED Display, Digit Height: 12.70mm(0.50inch), External Dimensions: 12.60x19.00x8.00mm (L x W x H)

Part No.		Chip			Iv@IF=20mA		Iv@IF=20mA	
Common Cathode	Common Anode	Material	Color	WLD	One Seg		One DP	
					Min.	Typ.	Min.	Typ.
LD5011AR	LD5011BR	GaAlAs	Super Red	640	8	10	8	10
LD5011AD	LD5011BD	GaAlAs	Hi-Red	640	18	25	18	25
LD5011AO	LD5011BO	GaAsP	Orange	625	7	9	7	9
LD5011AY	LD5011BY	GaAsP	Yellow	588	8	10	8	10
LD5011AG	LD5011BG	GaP	Green	568	7	9	7	9
LD5011AUR	LD5011BUR	AlGaInP	Ultra Red	640	50	45	50	45
LD5011AUO	LD5011BUO	AlGaInP	Ultra Orange	625	45	60	45	60
LD5011AUA	LD5011BUA	AlGaInP	Ultra Amber	605	50	45	50	45
LD5011AUY	LD5011BUY	AlGaInP	Ultra Yellow	595	50	45	50	45
LD5011AUG	LD5011BUG	AlGaInP	Ultra Green	573	50	45	50	45
LD5011APG	LD5011BPG	InGaN	Pure Green	525	120	500	120	500
LD5011AUB	LD5011BUB	InGaN	Ultra Blue	470	50	45	50	45
LD5011AUW	LD5011BUW	InGaN	Ultra White	\	100	120	100	120
Unit:	\	\	\	nm	mcd	mcd	mcd	mcd

## Electrical Characteristics & Absolute Maximum Ratings

Color		Electrical optical Characteristics <sup>[1]</sup>			Absolute Maximum Ratings <sup>[1]</sup>		
		Forward Voltage@ IF=20mA		Reverse Current VR=5V	Power Dissipation	DC Forward Current	Peak Forward Current <sup>[2]</sup>
		Typ.	Max.				
Super Red	Per Seg.	1.8	2.2	50	60	25	100
	Per DP	1.8	2.2	50	60	25	100
Hi-Red	Per Seg.	1.8	2.2	50	60	25	100
	Per DP	1.8	2.2	50	60	25	100
Orange	Per Seg.	2.1	2.5	50	80	50	100
	Per DP	2.1	2.5	50	80	50	100
Yellow	Per Seg.	2.1	2.5	50	80	50	100
	Per DP	2.1	2.5	50	80	50	100
Green	Per Seg.	2.2	2.5	50	80	50	100
	Per DP	2.2	2.5	50	80	50	100
Ultra Red	Per Seg.	1.9	2.6	50	60	50	100
	Per DP	1.9	2.6	50	60	50	100
Ultra Orange	Per Seg.	2	2.6	50	65	50	100
	Per DP	2	2.6	50	65	50	100
Ultra Amber	Per Seg.	2	2.6	50	65	50	100
	Per DP	2	2.6	50	65	50	100
Ultra Yellow	Per Seg.	2	2.6	50	65	50	100
	Per DP	2	2.6	50	65	50	100
Ultra Green	Per Seg.	2.1	2.6	50	75	50	100
	Per DP	2.1	2.6	50	75	50	100
Pure Green	Per Seg.	3.5	4	50	110	50	100
	Per DP	3.5	4	50	110	50	100
Ultra Blue	Per Seg.	3.5	4	50	120	50	100
	Per DP	3.5	4	50	120	50	100
Ultra White	Per Seg.	3.5	4	50	120	50	100
	Per DP	3.5	4	50	120	50	100
Unit:	\	V	V	uA	mW	mA	mA

Notes:

1. At Ta = 25 °C.

2. Peak forward current at 1/10 Duty Cycle, 0.1ms Pulse.