

## LD2531A/B Series - 0.25 inch Three Digit 7 Segment LED Display



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



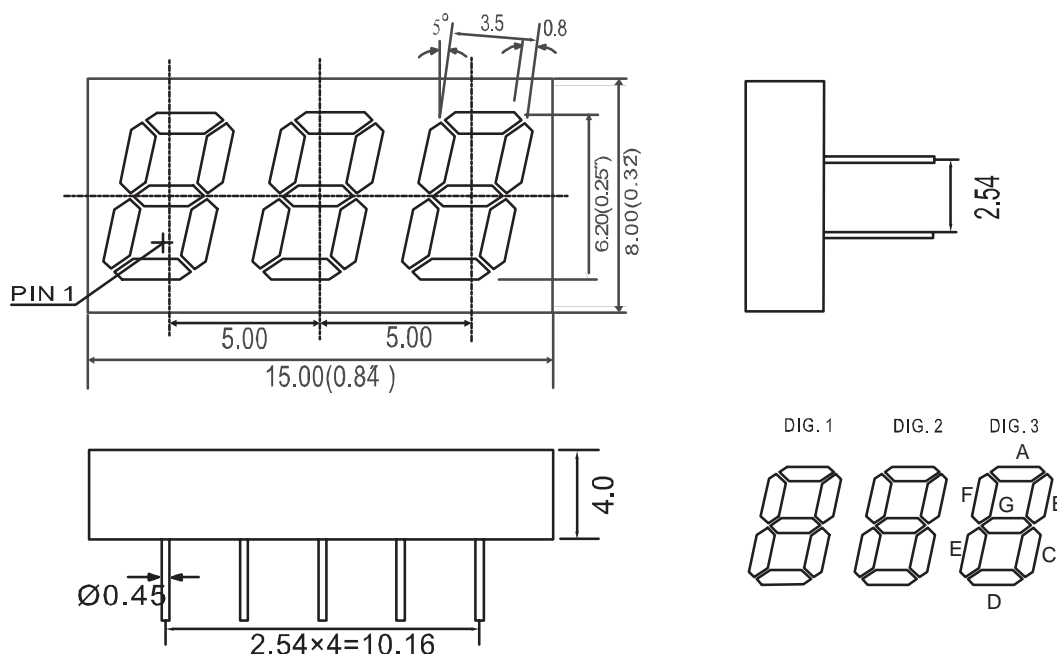
### Features

- 6.20 mm (0.25inch) 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

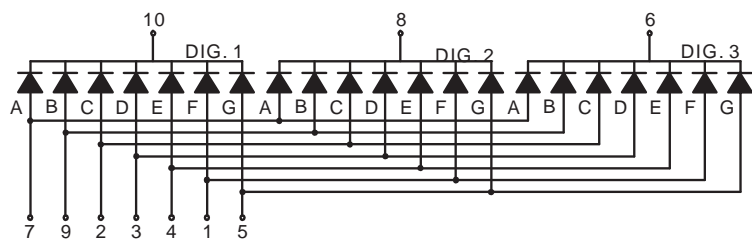


#### Notes:

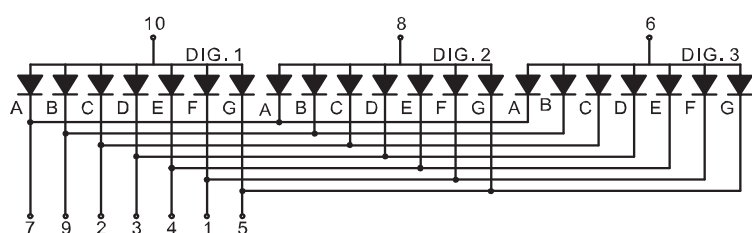
1. All dimensions are in millimeters(inches), Tolerance is  $\pm 0.25\text{mm}(0.01\text{inch})$  unless other wise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm

## Internal Circuit Diagram

**LD2531A (Common Cathode)**



**LD2531B (Common Anode)**



## Selection Guide

Three digits 7 Segment LED Display, Digit Height: 6.20mm(0.25inch), External Dimensions: 15.00x8.00x4.00mm (LxWxHmm)

Part No.		Chip			Iv@IF=20mA		Iv@IF=20mA	
Common Cathode	Common Anode	Material	Color	WLD	One Seg		One DP	
					Min.	Typ.	Min.	Typ.
LD2531AR	LD2531BR	GaAlAs	Super Red	640	8	10	8	10
LD2531AD	LD2531BD	GaAlAs	Hi-Red	640	18	25	18	25
LD2531AO	LD2531BO	GaAsP	Orange	625	7	9	7	9
LD2531AY	LD2531BY	GaAsP	Yellow	588	8	10	8	10
LD2531AG	LD2531BG	GaP	Green	568	7	9	7	9
LD2531AUR	LD2531BUR	AlGaInP	Ultra Red	640	30	45	30	45
LD2531AUO	LD2531BUO	AlGaInP	Ultra Orange	625	45	60	45	60
LD2531AUA	LD2531BUA	AlGaInP	Ultra Amber	65	30	45	30	45
LD2531AUY	LD2531BUY	AlGaInP	Ultra Yellow	595	30	45	30	45
LD2531AUG	LD2531BUG	AlGaInP	Ultra Green	573	30	45	30	45
LD2531APG	LD2531BPG	InGaN	Pure Green	525	120	300	120	300
LD2531AUB	LD2531BUB	InGaN	Ultra Blue	470	30	45	30	45
LD2531AUW	LD2531BUW	InGaN	Ultra White	\	100	120	100	120
Unit:	\	\	\	nm	mcd	mcd	mcd	mcd

### Electrical Characteristics & Absolute Maximum Ratings

Parameter		Electrical optical Characteristics <sup>[1]</sup>			Absolute Maximum Ratings <sup>[1]</sup>		
Emitted color		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	30	60	25	100
	Per DP	1.8	2.2	30	60	25	100
Hi-Red	Per Seg.	1.8	2.2	30	60	25	100
	Per DP	1.8	2.2	30	60	25	100
Orange	Per Seg.	2.1	2.5	30	80	30	100
	Per DP	2.1	2.5	30	80	30	100
Yellow	Per Seg.	2.1	2.5	30	80	30	100
	Per DP	2.1	2.5	30	80	30	100
Green	Per Seg.	2.2	2.5	30	80	30	100
	Per DP	2.2	2.5	30	80	30	100
Ultra Red	Per Seg.	1.9	2.6	30	60	30	100
	Per DP	1.9	2.6	30	60	30	100
Ultra Orange	Per Seg.	2	2.6	30	65	30	100
	Per DP	2	2.6	30	65	30	100
Ultra Amber	Per Seg.	2	2.6	30	65	30	100
	Per DP	2	2.6	30	65	30	100
Ultra Yellow	Per Seg.	2	2.6	30	65	30	100
	Per DP	2	2.6	30	65	30	100
Ultra Green	Per Seg.	2.1	2.6	30	75	30	100
	Per DP	2.1	2.6	30	75	30	100
Pure Green	Per Seg.	3.5	4	30	110	30	100
	Per DP	3.5	4	30	110	30	100
Ultra Blue	Per Seg.	3.5	4	30	120	30	100
	Per DP	3.5	4	30	120	30	100
Ultra White	Per Seg.	3.5	4	30	120	30	100
	Per DP	3.5	4	30	120	30	100
Unit:	\	V	V	uA	mW	mA	mA

Notes:

1. At Ta=25 deg.

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