LD3031A/B Series - 0.30 inch Three Digit 7 Segment LED Display



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

RoHS

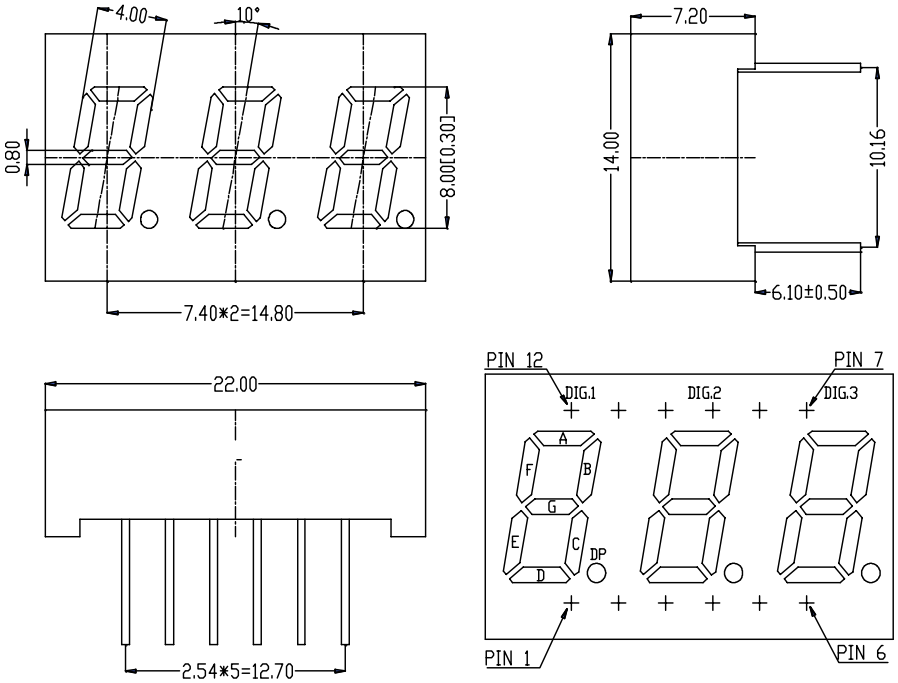
Features

- 8.00 mm (0.30 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

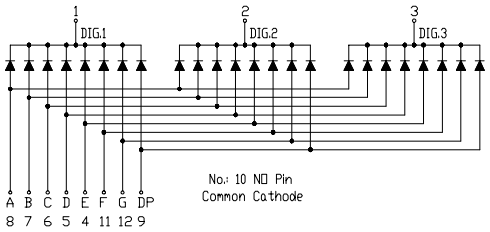


Notes:

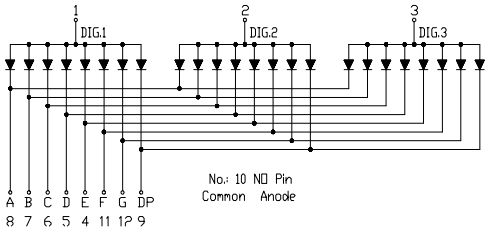
1. All dimensions are in millimeters(inches), Tolerance is ± 0.25mm(0.01inch)unless other wise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

Internal Circuit Diagram

LD3031A (Common Cathode)



LD3031B (Common Anode)



Selection Guide

Three Digit 7 Segment LED Display, Digit Height: 8.00mm(0.30 inch), External Dimensions: 22.00x14.00x7.20mm (L x W x H)

Part No.		Chip			I_V@I_F=20mA		Iv@IF=20mA	
Common Cathode	Common Anode	Material	Color	WLD	One Seg		One DP	
					Min.	Typ.	Min.	Typ.
LD3031AR	LD3031BR	GaAlAs	Super Red	640	8	10	8	10
LD3031AD	LD3031BD	GaAlAs	Hi-Red	640	18	25	18	25
LD3031AO	LD3031BO	GaAsP	Orange	625	7	9	7	9
LD3031AY	LD3031BY	GaAsP	Yellow	588	8	10	8	10
LD3031AG	LD3031BG	GaP	Green	568	7	9	7	9
LD3031AUR	LD3031BUR	AlGaInP	Ultra Red	640	30	45	30	45
LD3031AUO	LD3031BUO	AlGaInP	Ultra Orange	625	45	60	45	60
LD3031AUA	LD3031BUA	AlGaInP	Ultra Amber	605	30	45	30	45
LD3031AUY	LD3031BUY	AlGaInP	Ultra Yellow	595	30	45	30	45
LD3031AUG	LD3031BUG	AlGaInP	Ultra Green	573	30	45	30	45
LD3031APG	LD3031BPG	InGaN	Pure Green	525	120	300	120	300
LD3031AUB	LD3031BUB	InGaN	Ultra Blue	470	30	45	30	45
LD3031AUW	LD3031BUW	InGaN	Ultra White	\	100	120	100	120
Unit:	\	\	\	nm	mcd	mcd	mcd	mcd

Electrical Characteristics & Absolute Maximum Ratings

Color		Electrical Characteristics[1]			Absolute Maximum Ratings[1]		
		Forward Voltage@ IF=20mA		Reverse Current VR=5V	Power Dissipation	DC Forward Current	Peak Forward Current[2]
		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 °C.

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