LD10013A/B Series - 1.00 inch Single Digit 16 Segment LED Display

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

RoHS

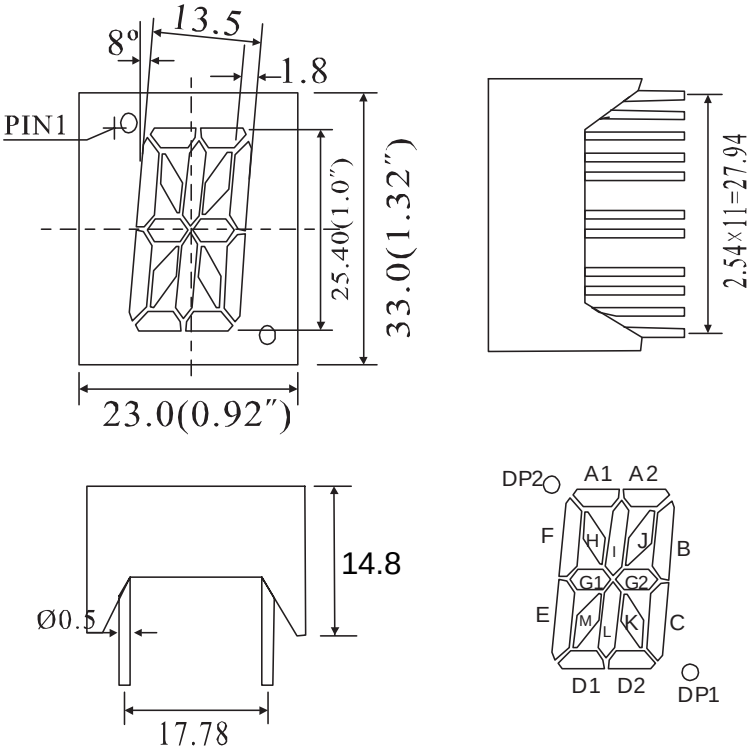
Features

- 25.40 mm (1.00 inch) digit high
- Excellent digit appearance
- Wide viewing angle
- Range of emitted colors
- I.C. compatible
- Low power consumption
- White segment, black face
- RoHS compliant

Available options

- Alternative emitting luminosity:
  Standard or high brightness version
- Alternative emitted color
- Alternative face and segment color
- Alternative font
- Both CA and CC versions are available
- Cropped terminal pins

Package Dimensions

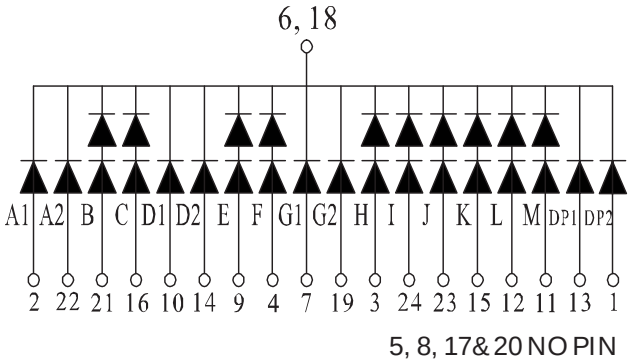


Notes:

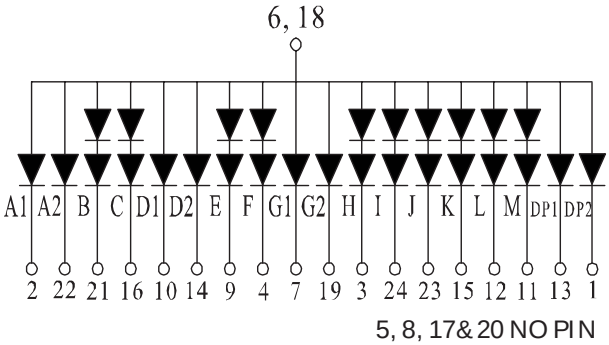
1. All dimensions are in millimeters (inches), Tolerance is ± 0.25mm(0.01inch)unless other wise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

Internal Circuit Diagram

LD10013A (Common Cathode)



LD10013B (Common Anode)



Selection Guide

Single Digit 16 Segment LED Display, Digit Height:25.40mm(1.00 inch), External Dimensions: 23.00x33.00x14.80mm (L x W x H)

Part No.		Chip			I_V@I_F=20mA		I_V@I_F=20mA	
Common Cathode	Common Anode	Material	Color	WLD	One Seg		One Seg A D G or DP	
					Min.	Typ.	Min.	Typ.
LD10013AR	LD10013BR	GaAlAs	Super Red	640	12	15	8	10
LD10013AD	LD10013BD	GaAlAs	Hi-Red	640	27	37.5	18	25
LD10013AO	LD10013BO	GaAsP	Orange	625	10.5	13.5	7	9
LD10013AY	LD10013BY	GaAsP	Yellow	588	12	15	8	10
LD10013AG	LD10013BG	GaP	Green	568	10.5	13.5	7	9
LD10013AUR	LD10013BUR	AlGaInP	Ultra Red	640	45	67.5	30	45
LD10013AUO	LD10013BUO	AlGaInP	Ultra Orange	625	67.5	90	45	60
LD10013AUA	LD10013BUA	AlGaInP	Ultra Amber	605	45	67.5	30	45
LD10013AUY	LD10013BUY	AlGaInP	Ultra Yellow	595	45	67.5	30	45
LD10013AUG	LD10013BUG	AlGaInP	Ultra Green	573	45	67.5	30	45
LD10013APG	LD10013BPG	InGaN	Pure Green	525	180	450	120	300
LD10013AUB	LD10013BUB	InGaN	Ultra Blue	470	45	67.5	30	45
LD10013AUW	LD10013BUW	SMD	Ultra White	\	150	180	100	120
Unit:	\	\	\	nm	mcd	mcd	mcd	mcd

Electrical Characteristics & Absolute Maximum Ratings

Parameter		Electrical optical Characteristics[1]			Absolute Maximum Ratings[1]		
Emitted color		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.