

### LD10017A/B Series - 1.00 inch Single Digit 16 Segment LED Display



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



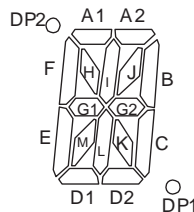
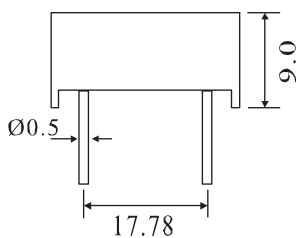
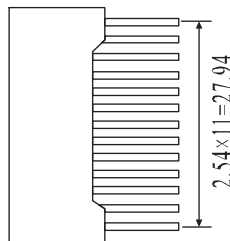
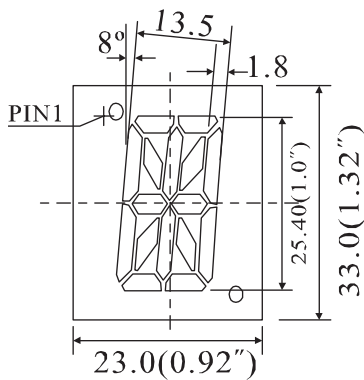
#### Features

- 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

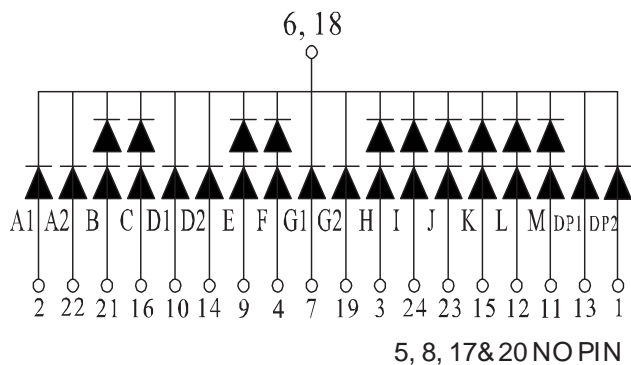


#### Notes:

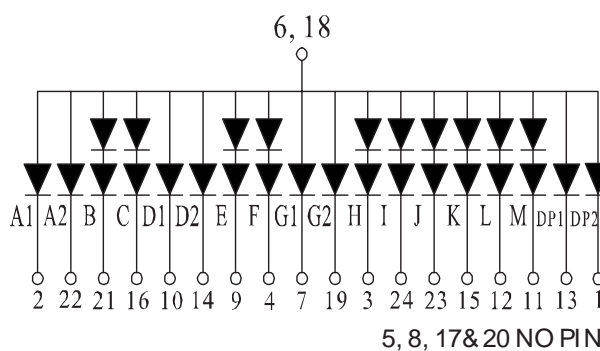
1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25\text{mm}$  ( $0.01\text{inch}$ ) unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

## Internal Circuit Diagram

**LD10017A (Common Cathode)**



**LD10017B (Common Anode)**



## Selection Guide

**Single Digit 16 Segment LED Display, Digit Height:25.40mm(1.00 inch), External Dimensions: 23.00x33.00x9.00mm (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.
LD10017AR	LD10017BR	GaAlAs	Super Red	640	12	15	8	10
LD10017AD	LD10017BD	GaAlAs	Hi-Red	640	27	37.5	18	25
LD10017AO	LD10017BO	GaAsP	Orange	625	10.5	13.5	7	9
LD10017AY	LD10017BY	GaAsP	Yellow	588	12	15	8	10
LD10017AG	LD10017BG	GaP	Green	568	10.5	13.5	7	9
LD10017AUR	LD10017BUR	AlGaInP	Ultra Red	640	45	67.5	30	45
LD10017AUO	LD10017BUO	AlGaInP	Ultra Orange	625	67.5	90	45	60
LD10017AUA	LD10017BUA	AlGaInP	Ultra Amber	605	45	67.5	30	45
LD10017AUY	LD10017BUY	AlGaInP	Ultra Yellow	595	45	67.5	30	45
LD10017AUG	LD10017BUG	AlGaInP	Ultra Green	573	45	67.5	30	45
LD10017APG	LD10017BPG	InGaN	Pure Green	525	180	450	120	300
LD10017AUB	LD10017BUB	InGaN	Ultra Blue	470	45	67.5	30	45
LD10017AUW	LD10017BUW	SMD	Ultra White	\	150	180	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 °C.

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