

LD10012A/B Series - 1.00 inch Single Digit 7 Segment LED Display



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



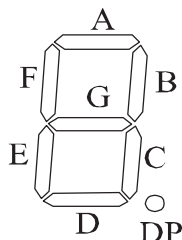
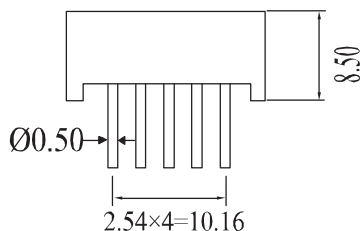
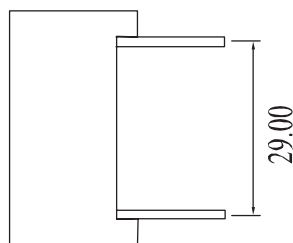
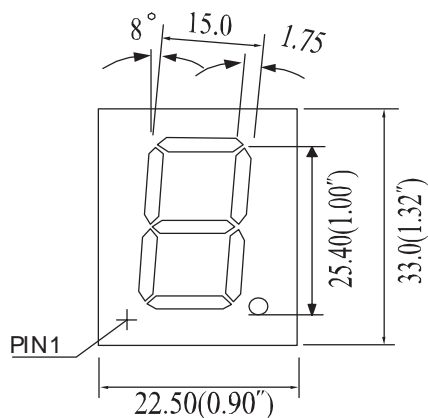
Features

- 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

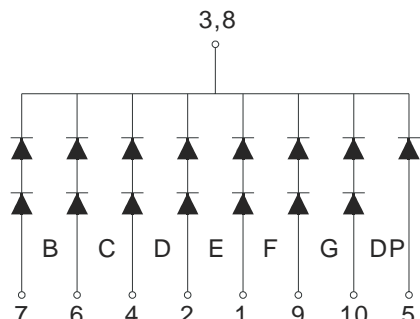


Notes:

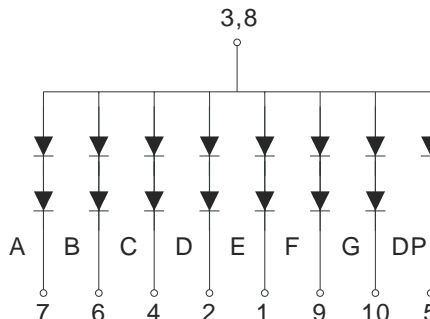
1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25\text{mm}$ (0.01inch) unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

Internal Circuit Diagram

LD10012A (Common Cathode)



LD10012B (Common Anode)



Selection Guide

Single Digit 7 Segment LED Display, Digit Height: 25.40mm(1.00inch), External Dimensions: 22.50x33.00x8.50mm (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.
LD10012AR	LD10012BR	GaAlAs	Super Red	640	12	15	8	10
LD10012AD	LD10012BD	GaAlAs	Hi-Red	640	27	37.5	18	25
LD10012AO	LD10012BO	GaAsP	Orange	625	10.5	13.5	7	9
LD10012AY	LD10012BY	GaAsP	Yellow	588	12	15	8	10
LD10012AG	LD10012BG	GaP	Green	568	10.5	13.5	7	9
LD10012AUR	LD10012BUR	AlGaInP	Ultra Red	640	45	67.5	30	45
LD10012AUO	LD10012BUO	AlGaInP	Ultra Orange	625	67.5	90	45	60
LD10012AUA	LD10012BUA	AlGaInP	Ultra Amber	605	45	67.5	30	45
LD10012AUY	LD10012BUY	AlGaInP	Ultra Yellow	595	45	67.5	30	45
LD10012AUG	LD10012BUG	AlGaInP	Ultra Green	573	45	67.5	30	45
LD10012APG	LD10012BPG	InGaN	Pure Green	525	180	450	120	300
LD10012AUB	LD10012BUB	InGaN	Ultra Blue	470	45	67.5	30	45
LD10012AUW	LD10012BUW	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.