

LD23011A/B Series – 2.30 inch Single Digit 7 Segment LED Display



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



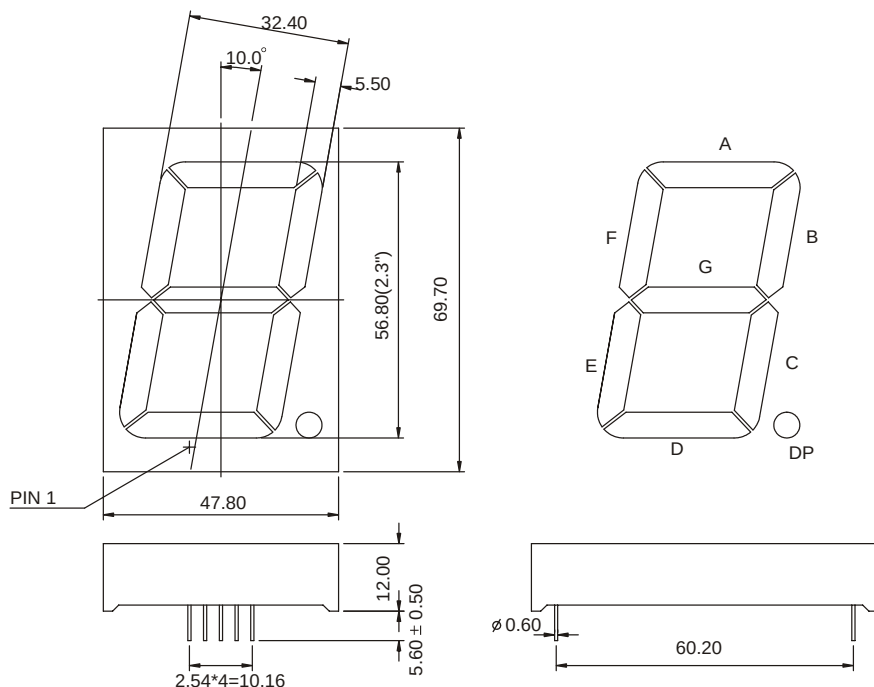
Features

- 56.80 mm (2.30 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

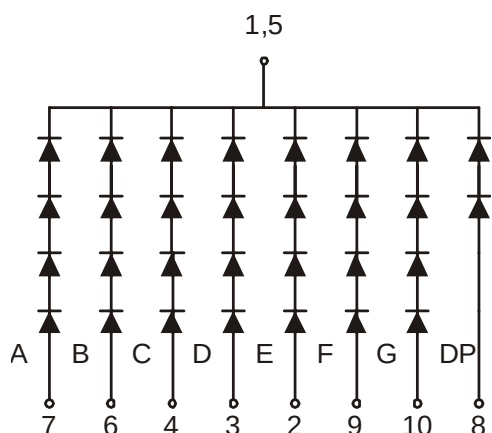


Notes:

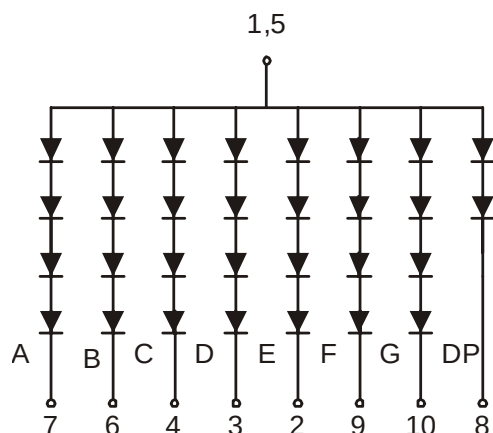
1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25\text{mm}$ (0.01inch) unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

Internal Circuit Diagram

LD23011A (Common Cathode)



LD23011B (Common Anode)



Selection Guide

Single Digit 7 Segment LED Display, Digit Height: 56.80mm(2.30inch), External Dimensions:
47.80x69.70x12.00mm (L x W x H)

Part No.		Chip			Iv@IF=20mA		Iv@IF=20mA	
Common Cathode	Cathode Anode	Material	Color	WLD	One Seg		One DP	
					Min.	Typ.	Min.	Typ.
LD23011AR	LD23011BR	GaAlAs	Super Red	640	24	30	12	15
LD23011AD	LD23011BD	GaAlAs	Hi-Red	640	54	75	27	37.5
LD23011AO	LD23011BO	GaAsP	Orange	625	21	27	10.5	13.5
LD23011AY	LD23011BY	GaAsP	Yellow	588	24	30	12	15
LD23011AG	LD23011BG	GaP	Green	568	21	27	10.5	13.5
LD23011AUR	LD23011BUR	AlGaInP	Ultra Red	640	90	135	45	67.5
LD23011AUO	LD23011BUO	AlGaInP	Ultra Orange	625	135	180	67.5	90
LD23011AUA	LD23011BUA	AlGaInP	Ultra Amber	605	90	135	45	67.5
LD23011AUY	LD23011BUY	AlGaInP	Ultra Yellow	595	90	135	45	67.5
LD23011AUG	LD23011BUG	AlGaInP	Ultra Green	573	90	135	45	67.5
LD23011APG	LD23011BPG	InGaN	Pure Green	525	360	900	180	450
LD23011AUB	LD23011BUB	InGaN	Ultra Blue	470	90	135	45	67.5
LD23011AUW	LD23011BUW	InGaN	Ultra White	\	300	360	150	180
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.