

LD8013C/D Series - 0.80 inch Single Digit 16 Segment LED Display



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



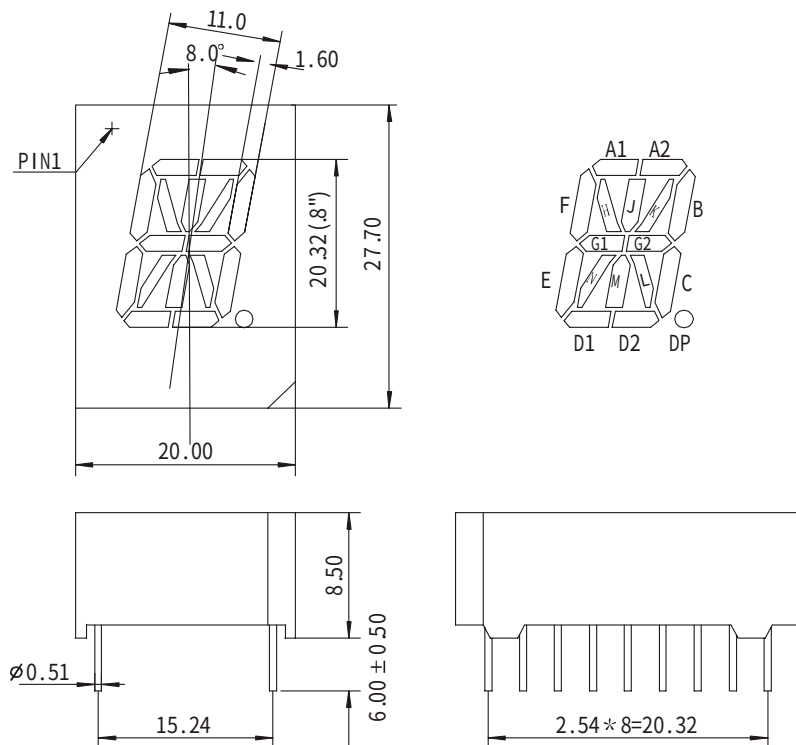
Features

- 20.32 mm (0.80 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

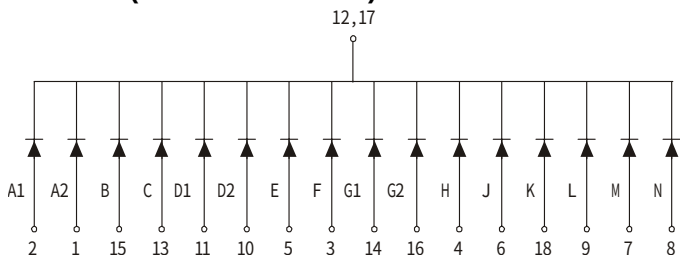


Notes:

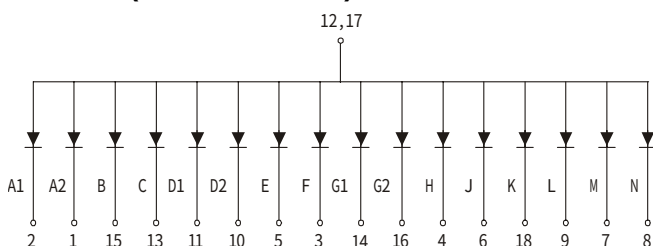
1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25\text{mm}$ (0.01inch) unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm.

Internal Circuit Diagram

LD8013C (Common Cathode)



LD8013D (Common Anode)



Selection Guide

Single Digit 7 Segment LED Display, Digit Height:20.32mm(0.80 inch), External Dimensions:
20.00x27.70x8.50mm (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 DP	
					Min.	Typ.	Min.	Typ.
LD8013CR	LD8013DR	GaAlAs	Super Red	640	8	10	8	10
LD8013CD	LD8013DD	GaAlAs	Hi-Red	640	18	25	18	25
LD8013CO	LD8013DO	GaAsP	Orange	625	7	9	7	9
LD8013CY	LD8013DY	GaAsP	Yellow	588	8	10	8	10
LD8013CG	LD8013DG	GaP	Green	568	7	9	7	9
LD8013CUR	LD8013DUR	AlGaInP	Ultra Red	640	30	45	30	45
LD8013CUO	LD8013DUO	AlGaInP	Ultra Orange	625	45	60	45	60
LD8013CUA	LD8013DUA	AlGaInP	Ultra Amber	605	30	45	30	45
LD8013CUY	LD8013DUY	AlGaInP	Ultra Yellow	595	30	45	30	45
LD8013CUG	LD8013DUG	AlGaInP	Ultra Green	573	30	45	30	45
LD8013CPG	LD8013DPG	InGaN	Pure Green	525	120	300	120	300
LD8013CUB	LD8013DUB	InGaN	Ultra Blue	470	30	45	30	45
LD8013CUW	LD8013DUW	SMD	Ultra White	\	100	120	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.