LM1601616C/B Series – 1.50 inch 16x16 Dot Matrix LED Display

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

RoHS

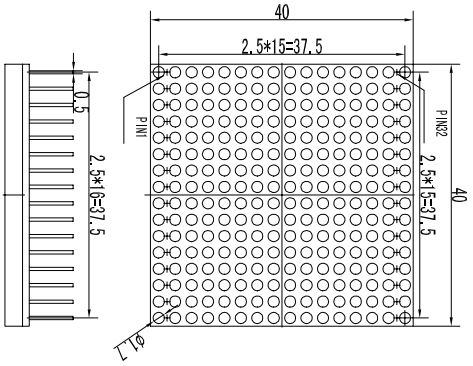
Features

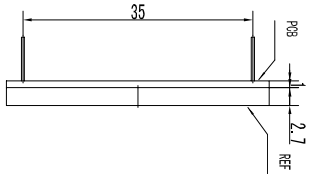
- 39.00 mm (1.50 inch) matrix height
- Dot size: Diameter 1.80 mm
- Pitch: 2.5 mm
- Wide viewing angle
- Range of emitted colors
- I.C. compatible
- Low power consumption
- White dot, grey or black face
- RoHS compliant

Available options

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

Package Dimensions



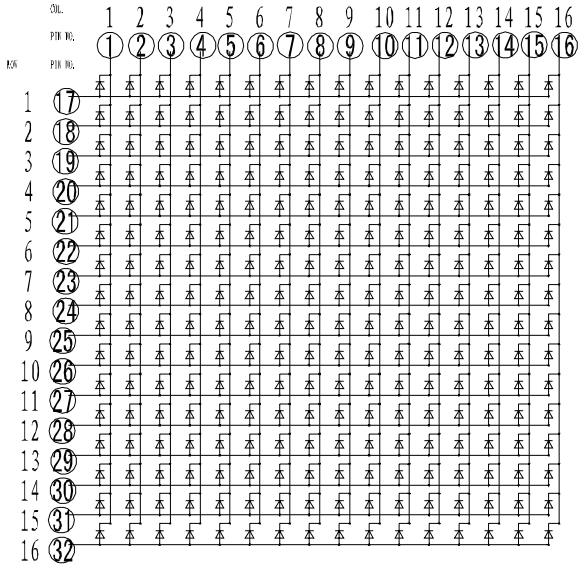


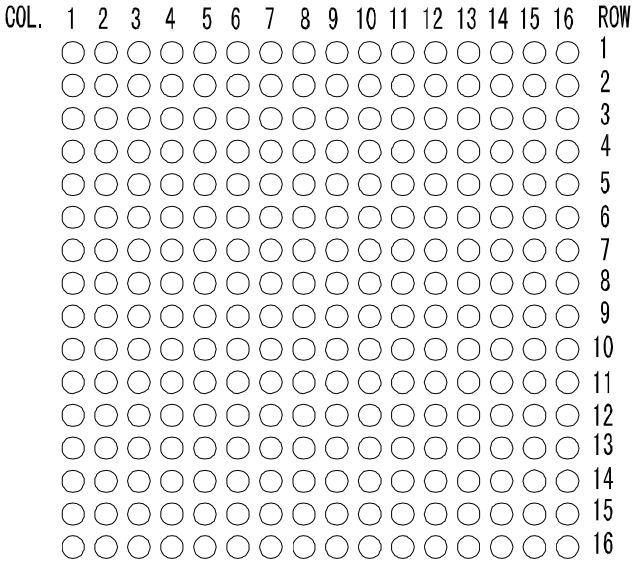
Notes:

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

LM1601616D (Common Cathode Row)





Selection Guide

Part No.		Chip			Iv@IF=20mA	
Common Cathode Row	Common Anode Row	Material	Color	WLD	One Dot	
					Min.	Typ.
LM1601616CR	LM1601616DR	GaAlAs	Super Red	640	8	10
LM1601616CD	LM1601616DD	GaAlAs	Hi-Red	640	18	25
LM1601616CO	LM1601616DO	GaAsP	Orange	625	7	9
LM1601616CY	LM1601616DY	GaAsP	Yellow	588	8	10
LM1601616CG	LM1601616DG	GaP	Green	568	7	9
LM1601616CUR	LM1601616DUR	AlGaInP	Ultra Red	640	30	45
LM1601616CUO	LM1601616DUO	AlGaInP	Ultra Orange	625	45	60
LM1601616CUA	LM1601616DUA	AlGaInP	Ultra Amber	605	30	45
LM1601616CUY	LM1601616DUY	AlGaInP	Ultra Yellow	595	30	45
LM1601616CUG	LM1601616DUG	AlGaInP	Ultra Green	573	30	45
LM1601616CPG	LM1601616DPG	InGaN	Pure Green	525	120	300
LM1601616CUB	LM1601616DUB	InGaN	Ultra Blue	470	30	45
LM1601616CUW	LM1601616DUW	SMD	Ultra White	\	100	120
Unit:	\	\	\	nm	mcd	mcd

Electrical Characteristics & Absolute Maximum Ratings

Color		Electrical Characteristics[1]			Absolute Maximum Ratings[1]		
		V_F@ I_F=20mA[2]		Reverse Current VR=5V	Power Dissipation	DC Forward Current	Peak Forward Current[3]
		Typ.	Max.				
Super Red	Per Dot	1.8	2.2	30	60	25	100
Hi-Red	Per Dot	1.8	2.2	30	60	25	100
Orange	Per Dot	2.1	2.5	30	80	30	100
Yellow	Per Dot	2.1	2.5	30	80	30	100
Green	Per Dot	2.2	2.5	30	80	30	100
Ultra Red	Per Dot	1.9	2.6	30	60	30	100
Ultra Orange	Per Dot	2.0	2.6	30	65	30	100
Ultra Amber	Per Dot	2.0	2.6	30	65	30	100
Ultra Yellow	Per Dot	2.0	2.6	30	65	30	100
Ultra Green	Per Dot	2.1	2.6	30	75	30	100
Pure Green	Per Dot	3.5	4.0	30	110	30	100
Ultra Blue	Per Dot	3.5	4.0	30	120	30	100
Ultra White	Per Dot	3.5	4.0	30	120	30	100
Unit:	\	V	V	uA	mW	mA	mA

Notes:

1. At Ta = 25 °C.

2. Forward voltage at forward current = 20mA.

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