

# **LED Display**

## **Product Data Sheet**

### **IE-88R-119N**

Spec No.:

Effective Date: Jan 15, 2015

## FEATURES

1.9 inch (48 mm) Matrix Height  
Low Power Requirement  
High Brightness and High Contrast  
Excellent Characters Appearance  
IC Compatible , Easy Assembly  
RoHS Compliant

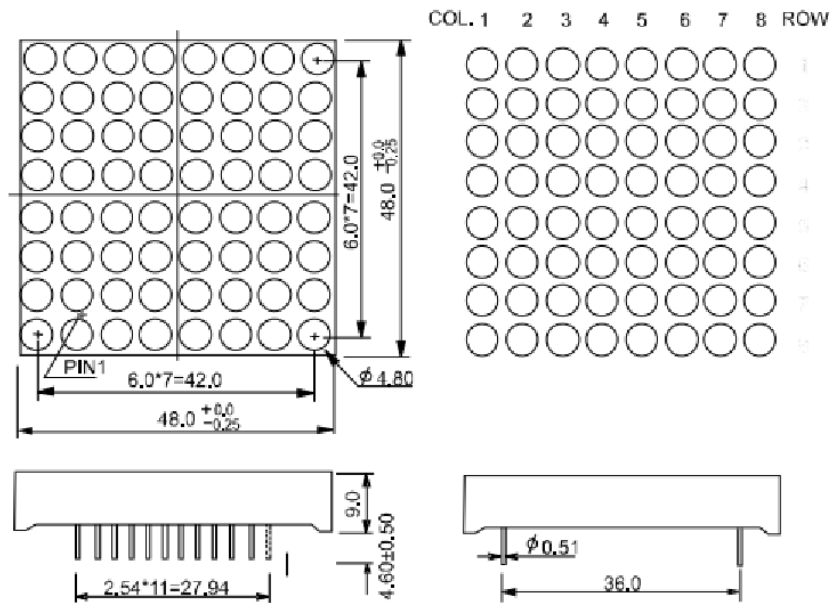
## DESCRIPTION

This is a 1.9 inch (48 mm) matrix height 8×8 matrix LED display. This device utilizes red LED chips, which are made from AlGaInP, and has a black face and white dot color.

## DEVICE

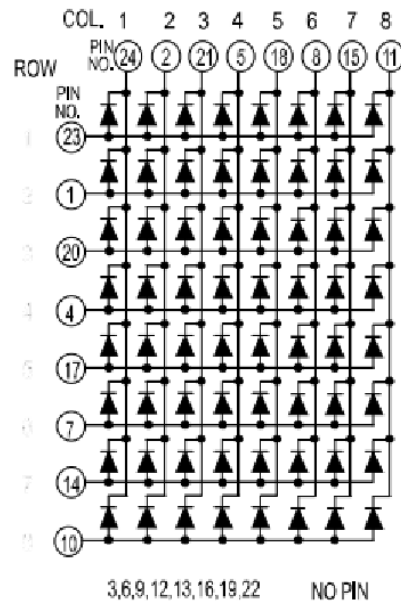
Red	Description
IE-88R-119N	Anode Row, Cathode Column
64 LED CHIPS	

## PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters (inches). Tolerance is  $\pm 0.25$  (0.010") unless otherwise specified.

## INTERNAL CIRCUIT DIAGRAM



## PIN CONNECTION

PIN NO.	CONNECTION
1	Anode Row 2
2	Cathode Column 2
3	NO PIN
4	Anode Row 4
5	Cathode Column 4
6	NO PIN
7	Anode Row 6
8	Cathode Column 6
9	NO PIN
10	Anode Row 8
11	Cathode Column 8
12	NO PIN
13	NO PIN
14	Anode Row 7
15	Cathode Column 7
16	NO PIN
17	Anode Row 5
18	Cathode Column 5
19	NO PIN
20	Anode Row 3
21	Cathode Column 3
22	NO PIN

**ABSOLUTE MAXIMUM RATINGS AT Ta=25°C**

PARAMETER	SYMBOL	AlGaInP RED	UNIT
Power Dissipation Per Segment	PAD	50	mw
Reverse Voltage Per Segment	VR	5	V
Continuous Forward Current Per Segment	IAF	20	mA
Peak Forward Current Per Segment(Duty-0.1,1KHz)	IPF	60	mA
Operating Temperature Range	TOPr	-20°C to 80°C	
Storage Temperature Range	Tstg	-30°C to 85°C	

Lead Soldering Temperature 260°C at 1.6mm From Body for 3 second

**ELECTRICAL/OPTICAL CHARACTERISTICS AT Ta=25°C****AlGaInP RED**

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Forward Voltage, Per Segment	VF	IF=20mA	1.9	2.0	2.5	V
Reverse Current, Per Segment	IR	VR=5V			50	μA
Peak Emission Wavelength	λp	IF=20mA	630	633	637	nm
Luminous Intensity Per Segment	IV	IF=10mA	11	13	15	mcd
		IF=20mA	23	25	28	

**TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES @ TA = 25°C**

