LED Display

Product Data Sheet

IE-58O-123U

Spec No.:

Effective Date: April 15, 2014

FEATURES

2.3 inch Matrix Height

Low Power Requirement

High Brightness and High Contrast

Excellent Characters Appearance

IC Compatible , Easy Assembly

RoHS Compliant

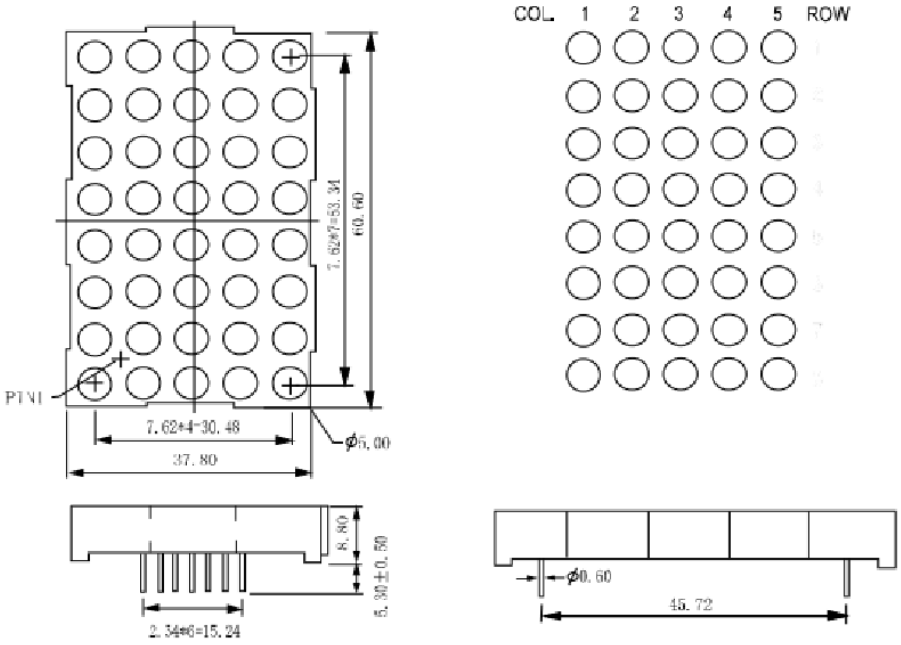
DESCRIPTION

This is a 2.3 inch matrix height 5×8 matrix LED display. This device utilizes amber LED chips, which are made from AlGaInP, and has a black face and white dot color.

DEVICE

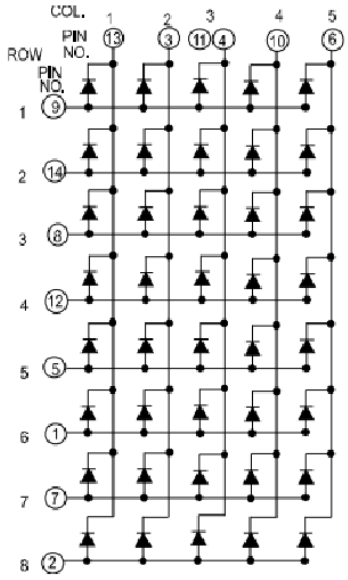
Amber	Description
IE-58O-123U	Anode Row, Cathode Column
TOTAL 40 LED CHIPS	

PACKAGE DIMENSIONS



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

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

PIN NO.	CONNECTION
1	Anode Row 6
2	Anode Row 8
3	Cathode Column 2
4 11	Cathode Column 3
5	Anode Row 5
6	Cathode Column 5
7	Anode Row 7
8	Anode Row 3
9	Anode Row 1
10	Cathode Column 4
12	Anode Row 4
13	Cathode Column 1
14	Anode Row 2

ABSOLUTE MAXIMUM RATINGS AT Ta=25℃

PARAMETER	SYMBOL	AlGaInP AMBER	UNIT
Power Dissipation Per Segment	PAD	60	mw
Reverse Voltage Per Segment	VR	5	V
Continuous Forward Current Per Segment	IAF	25	mA
Peak Forward Current Per Segment(Duty-0.1,1KHz)	IPF	80	mA
Operating Temperature Range	TOPr	-20℃ to 80℃	
Storage Temperature Range	Tstg	-30℃ to 85℃	
Lead Soldering Temperature 260℃ at 1.6mm From Body for 3 second			

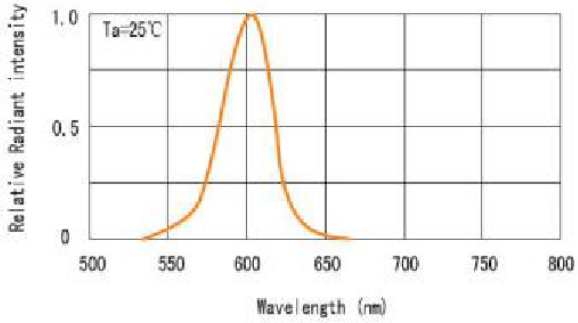
ELECTRICAL/OPTICAL CHARACTERISTICS AT Ta=25℃

AlGaInP AMBER

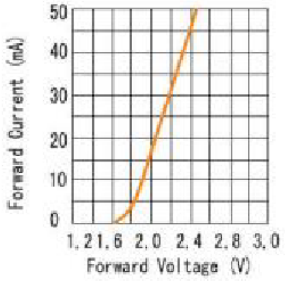
PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Forward Voltage, Per Segment	VF	IF=20mA	1.9	2.0	2.5	V
Reverse Current, Per Segment	IR	VR=5V			50	μA
Peak Emission Wavelength	λp	IF=20mA	600	603	606	nm
Luminous Intensity Per Segment	IV	IF=10mA	50	60	70	mcd
		IF=20mA	100	120	140	

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

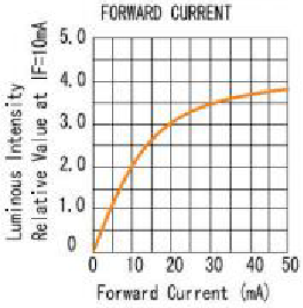
RELATIVE INTENSITY VS. WAVELENGTH



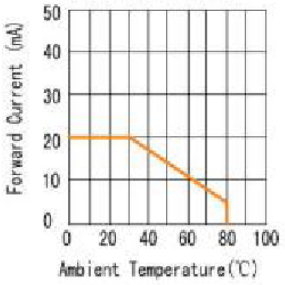
FORWARD CURRENT VS. FORWARD VOLTAGE



LUMINOUS INTENSITY VS. FORWARD CURRENT



ALLOWABLE FORWARD CURRENT AMBIENT TEMPERATURE



LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE