EN: This Datasheet/Document is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

Kingbright

101.6mm (4.0 INCH) 5x7 DOT MATRIX DISPLAY

Part Number: TBA40-11SURKCGKWA

Hyper Red
Green

Features

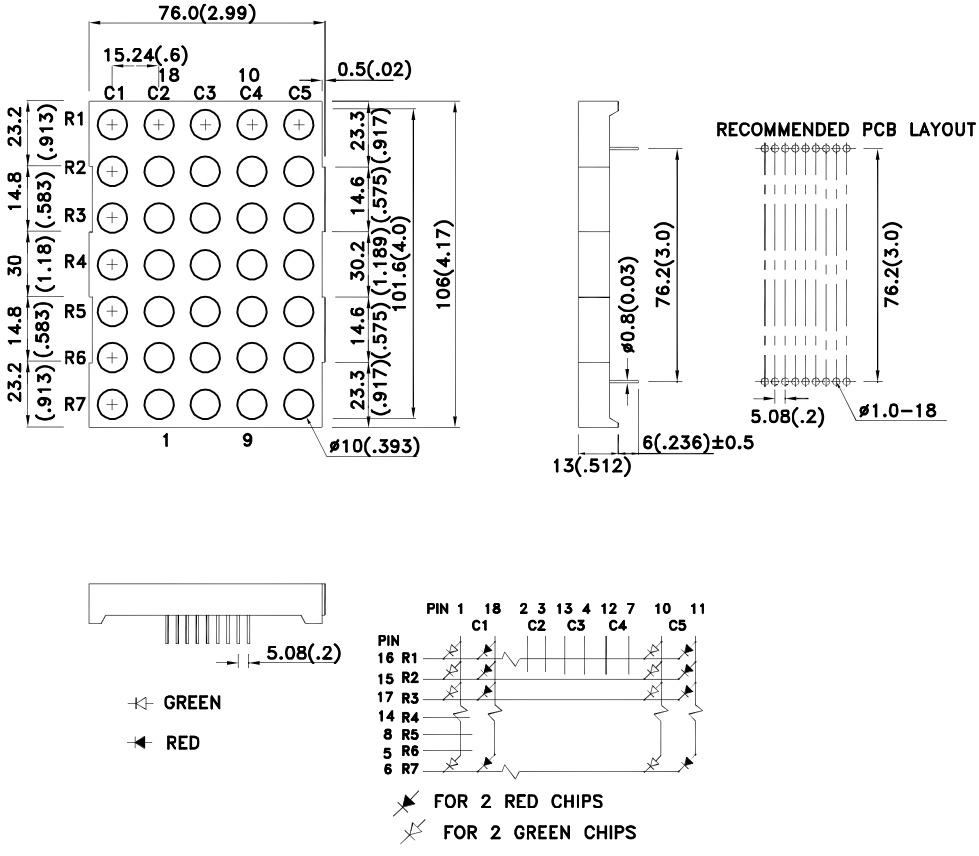
- 4.0 inch matrix height.
- Dot size 10mm.
- Low current operation.
- High contrast and light output.
- Stackable horizontally.
- Easy mounting on p.c. boards or sockets.
- Multicolor available.
- Mechanically rugged.
- Standard : gray face, white dot.
- RoHS compliant.

Description

The Hyper Red source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

The Green source color devices are made with AlGaInP on GaAs substrate Light Emitting Diode.

Package Dimensions & Internal Circuit Diagram



Notes:
1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
2. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
TBA40-11SURKCGKWA	Hyper Red (AlGaInP)	WHITE DIFFUSED	26000	97500	Column Anode
	Green (AlGaInP)		26000	90000	

Note:
1. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

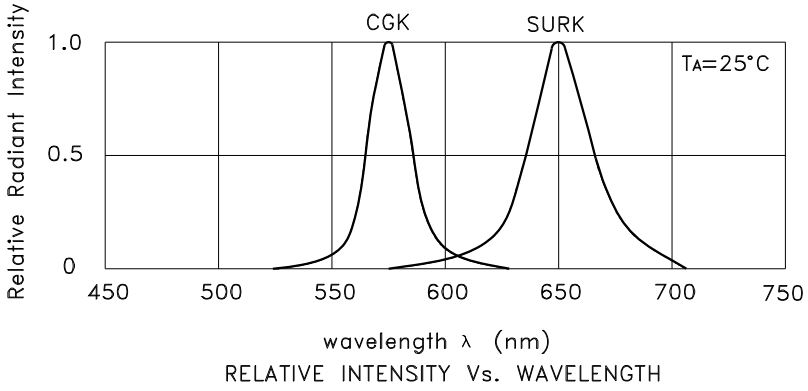
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red Green	650 574		nm	I_F=20mA
λD [1]	Dominant Wavelength	Hyper Red Green	630 570		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red Green	28 20		nm	I_F=20mA
C	Capacitance	Hyper Red Green	35 15		pF	V_F=0V;f=1MHz
V_F [2]	Forward Voltage (Per Dot)	Hyper Red Green	3.9 4.2	5.0 5.0	V	I_F=20mA
I_R	Reverse Current (Per Dot)	Hyper Red Green		10	uA	V_R=5V

Notes:
1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

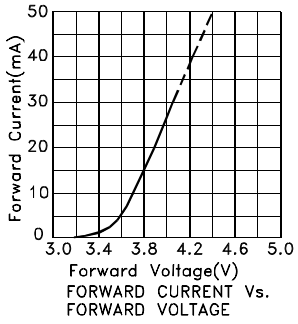
Parameter	Hyper Red	Green	Units
Power dissipation (Per Dot)	150	150	mW
DC Forward Current (Per Dot)	30	30	mA
Peak Forward Current [1] (Per Dot)	185	150	mA
Reverse Voltage (Per Dot)	5		V
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3-5 Seconds		

Notes:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.

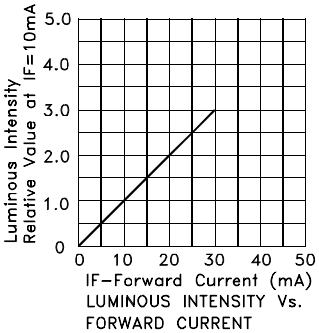


RELATIVE INTENSITY Vs. WAVELENGTH

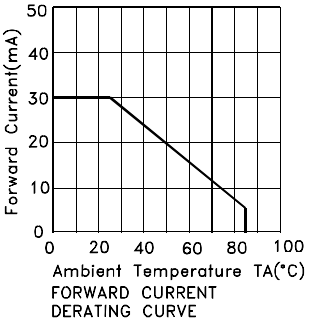
TBA40-11SURKCGKWA
Hyper Red



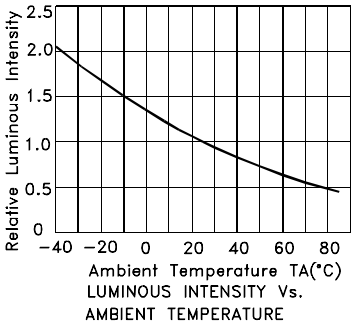
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

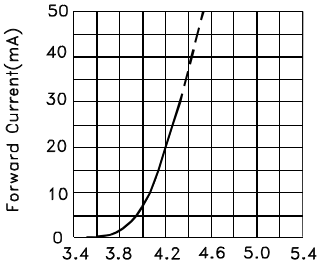


FORWARD CURRENT
DERATING CURVE

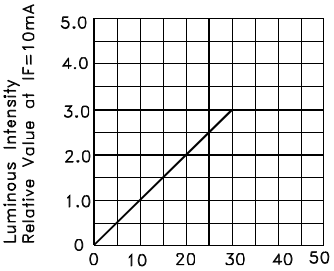


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

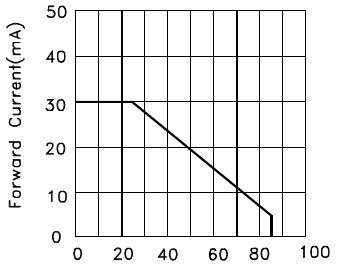
Green



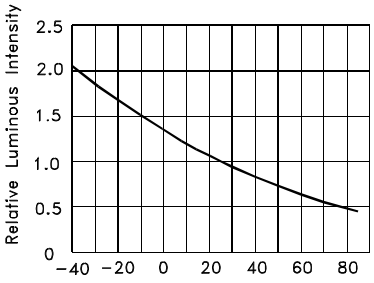
Forward Voltage(V)
FORWARD CURRENT Vs
FORWARD VOLTAGE



IF–Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT

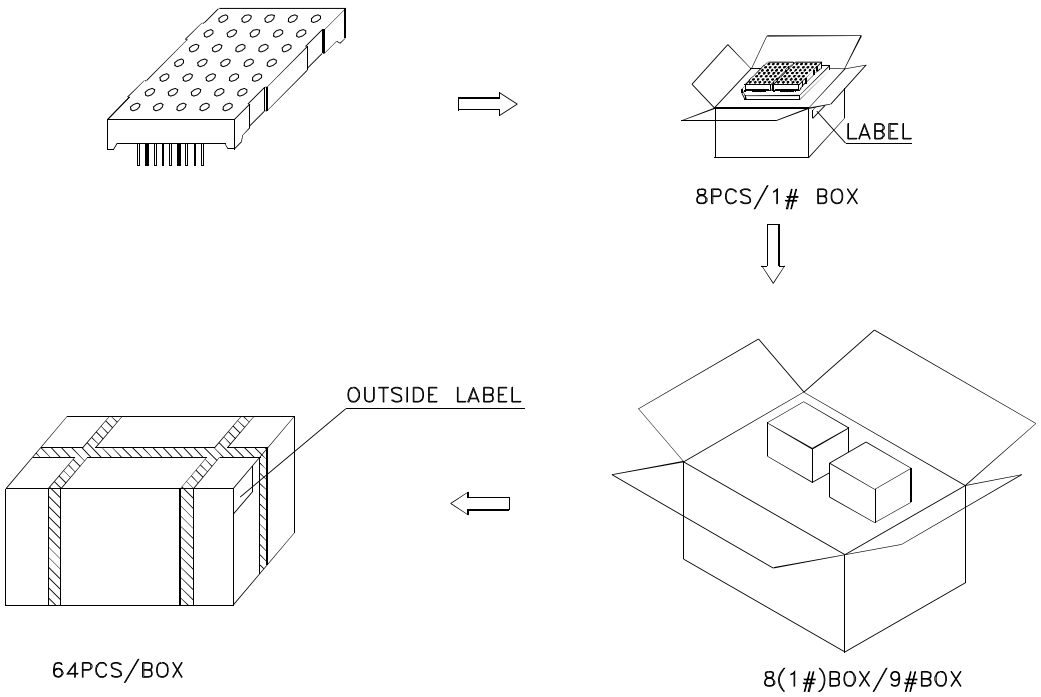


Ambient Temperature T_A (°C)
FORWARD CURRENT
DERATING CURVE

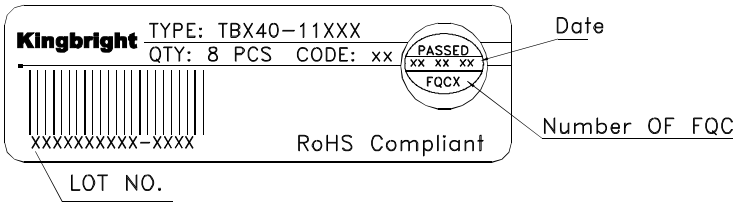


Ambient Temperature T_A(°C)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

PACKING & LABEL SPECIFICATIONS **TBA40-11SURKCGKWA**



Inside LABEL Paste On The 1#BOX



Outside LABEL Paste On The Box

