



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

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

Part Number: TBA40-11SURKCGKWA

Hyper Red
Green

Features

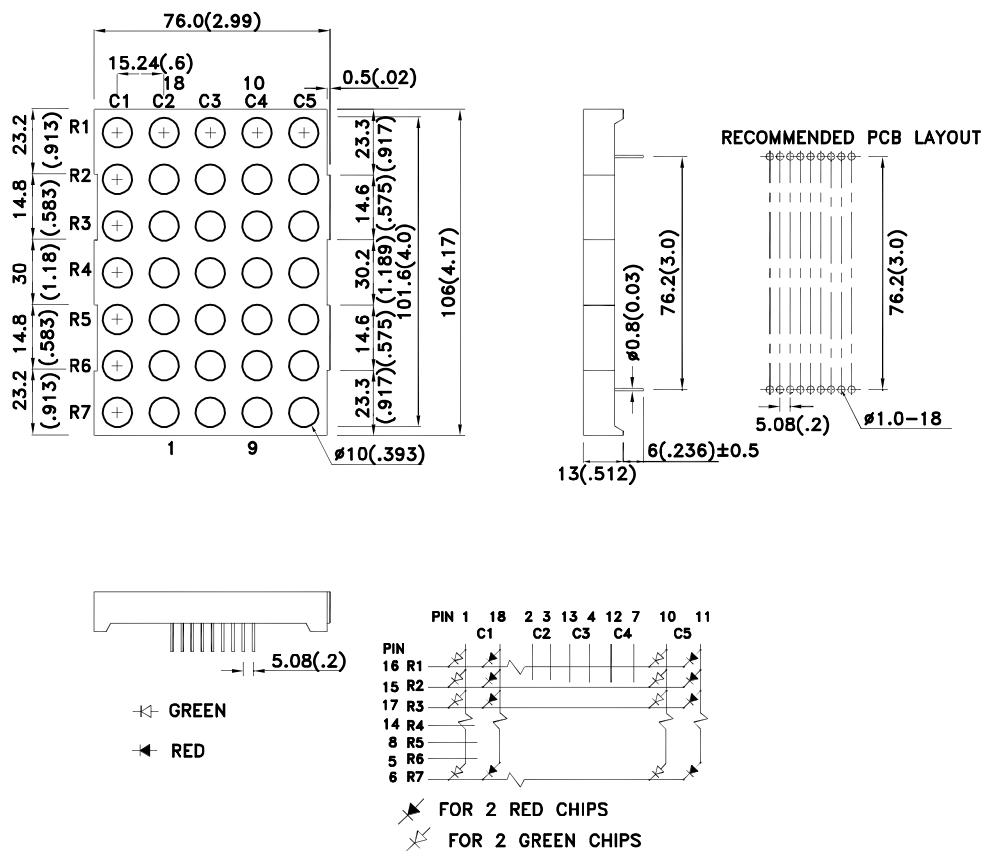
- 4.0 inch matrix height.
- Dot size 10mm.
- Low current operation.
- High contrast and light output.
- Stackable horizontally.
- Easy mounting on p.c. boards or sockets.
- Multicolor available.
- Mechanically rugged.
- Standard : gray face, white dot.
- RoHS compliant.

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 $\pm 0.25(0.01)$ 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
λ_{peak}	Peak Wavelength	Hyper Red Green	650 574		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	Hyper Red Green	630 570		nm	I _F =20mA
$\Delta\lambda_{1/2}$	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.

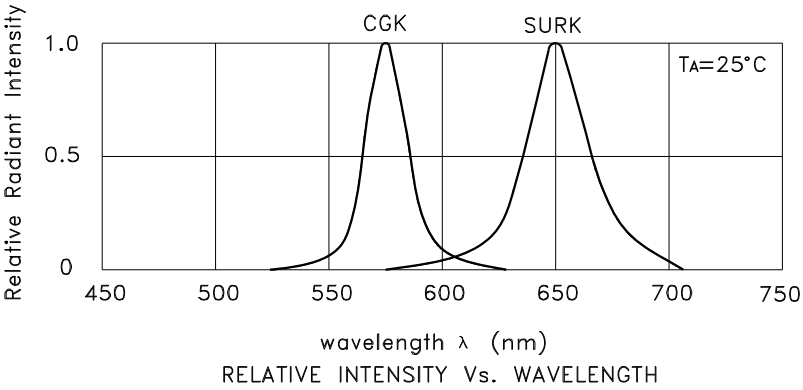
Absolute Maximum Ratings at TA=25°C

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		

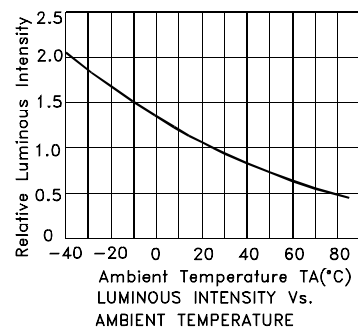
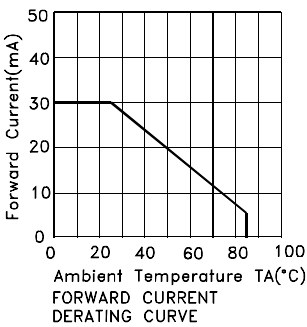
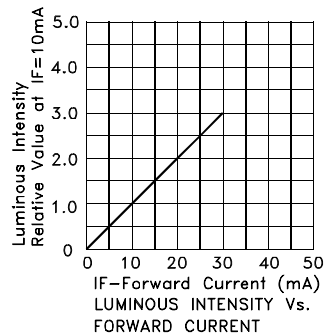
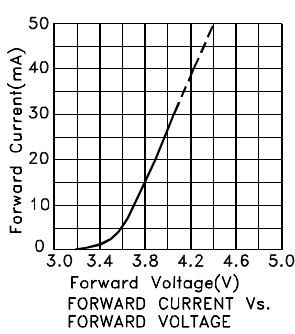
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

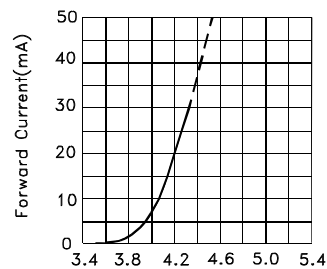
2. 2mm below package base.



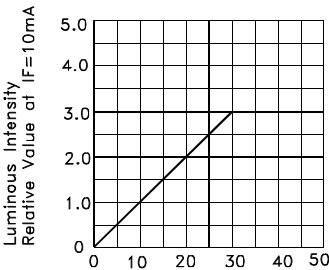
TBA40-11SURKCGKWA
Hyper Red



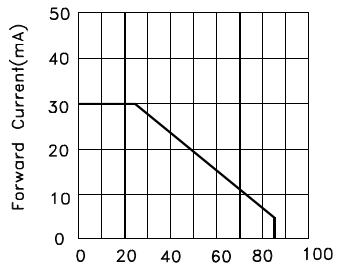
Green



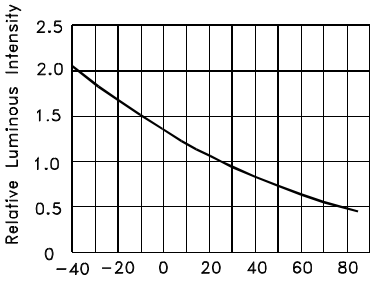
Forward Voltage(V)
FORWARD CURRENT Vs
FORWARD VOLTAGE



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



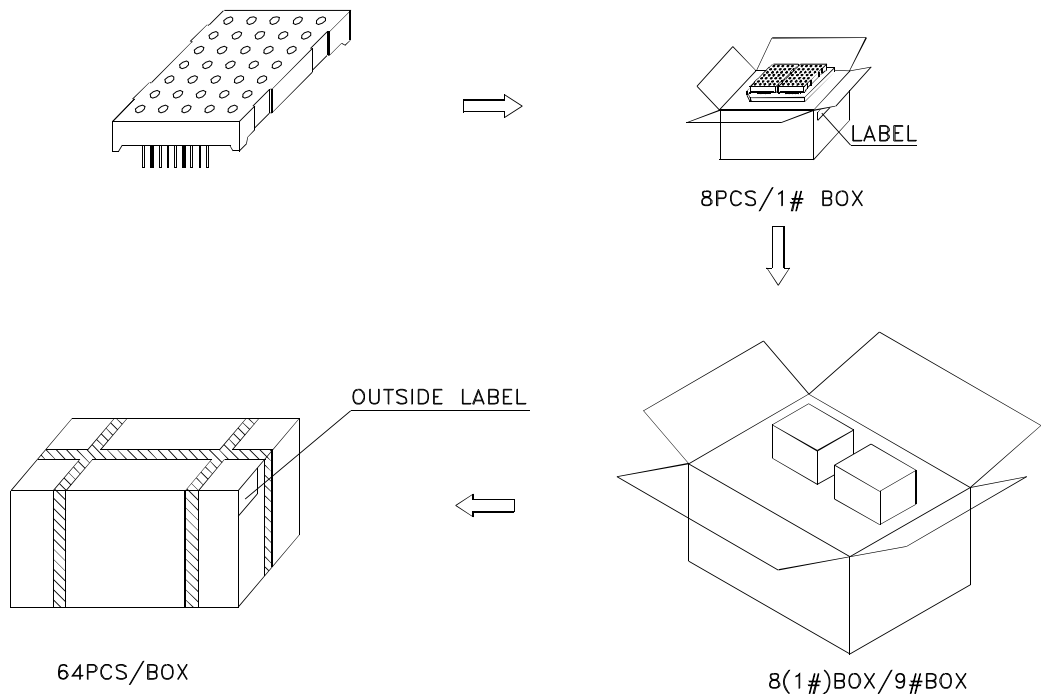
Ambient Temperature Ta (°C)
FORWARD CURRENT
DERATING CURVE



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

PACKING & LABEL SPECIFICATIONS

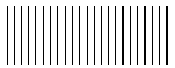
TBA40-11SURKCGKWA



Inside LABEL Paste On The 1#BOX

Kingbright	TYPE: TBX40-11XXX	Date
QTY: 8 PCS	CODE: xx	
		Number OF FQC
XXXXXXXXXX-XXXX	RoHS Compliant	
LOT NO.		

Outside LABEL Paste On The Box

XXXXXX		Number OF QA
TBX40-11XXX	Bin Code	
64 PCS	XX	Date
		
	RoHS Compliant	