

Part Number: TBA12-12SURKCGKWA

Hyper Red
Green

Features

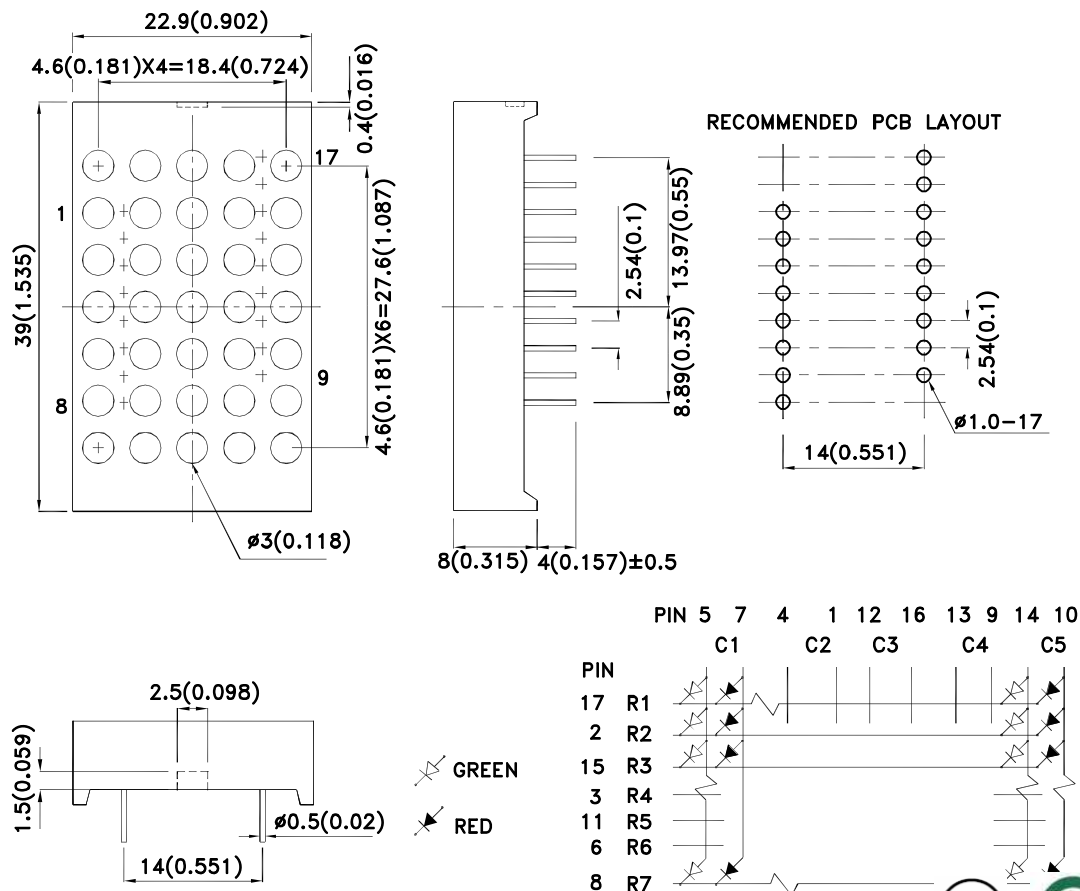
- 1.2 inch matrix height.
- Dot size 3mm.
- Low current operation.
- High contrast and light output.
- Column cathode and column anode available.
- Easy mounting on P.C. boards or sockets.
- Mechanically rugged.
- Standard : gray face, white dot.
- RoHS compliant.

Description

The Hyper Red source color devices are made with Al-GaInP 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



Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
TBA12-12SURKCGKWA	Hyper Red (AlGaInP)	White Diffused	31000	82000	Column Anode
	Green (AlGaInP)		21000	50000	

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	Hyper Red Green	1.95 2.1	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	Hyper Red Green		10	uA	V _R =5V

Notes:

1.Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

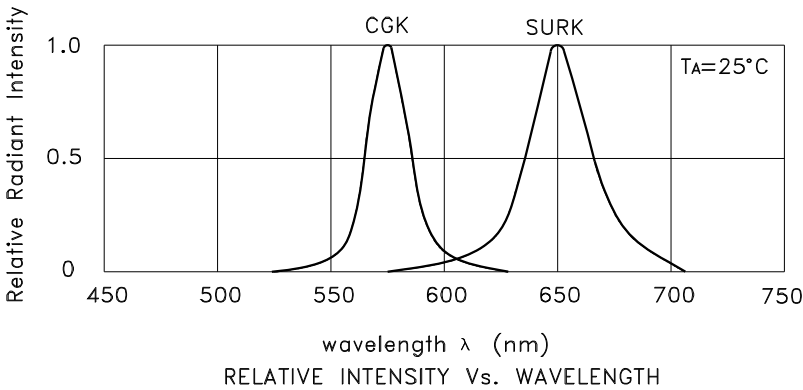
Absolute Maximum Ratings at TA=25°C

Parameter	Hyper Red	Green	Units
Power dissipation	75	75	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	185	150	mA
Reverse Voltage	5		V
Operating/Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3-5 Seconds		

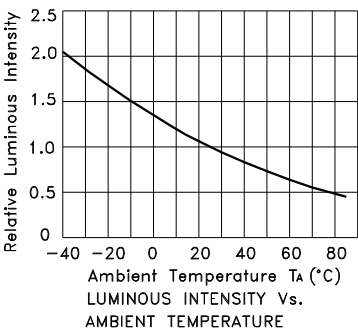
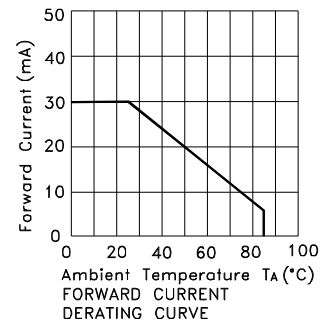
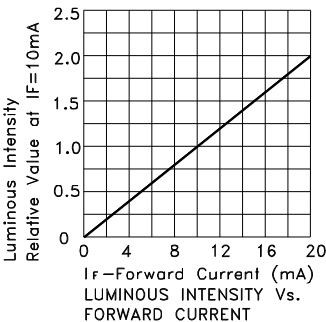
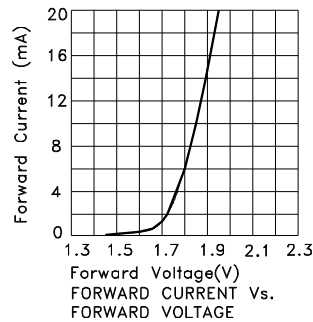
Notes:

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

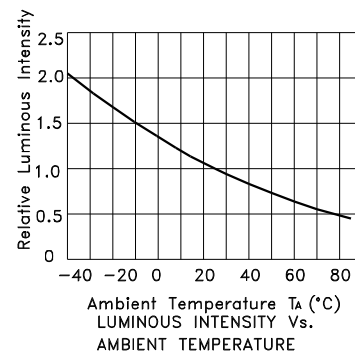
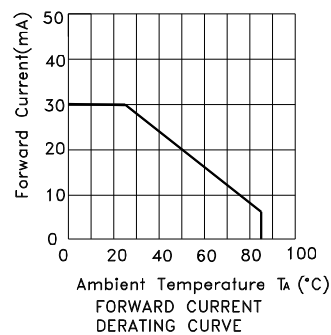
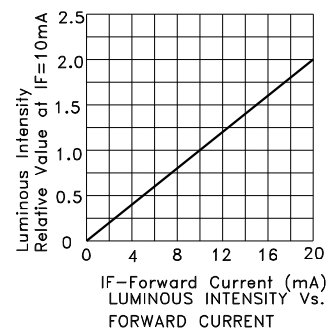
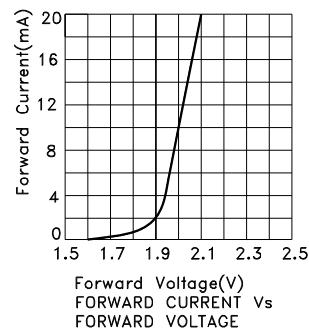
2. 2mm below package base.



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Hyper Red

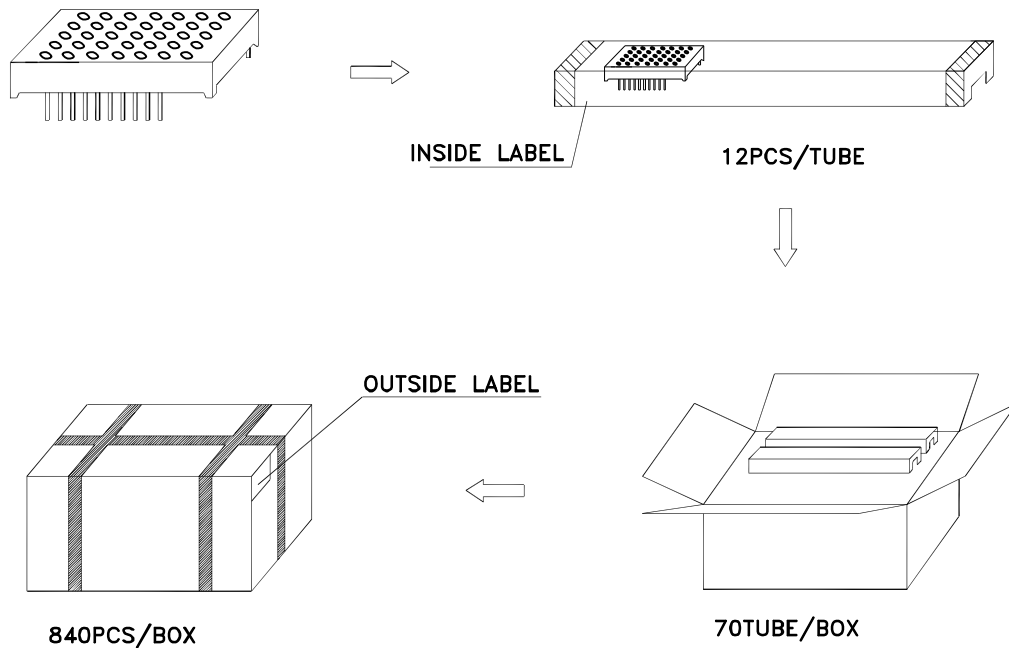


Green



PACKING & LABEL SPECIFICATIONS

TBA12-12SURKCGKWA



Inside Label On IC-tube

Kingbright	TYPE: TBx12-12xxx	QTY: 12 PCS	CODE: xx	PASSED xx xx xx FQCX	Date
XXXXXXXXXX-XXXX				Number OF FQC	
RoHS Compliant					
LOT NO.					

Outside Label On Box

XXXXXX	Bin Code		Number OF QA
TBx12-12xxx	XX	QAxx xx xx xx PASSED	Date
840 PCS	RoHS Compliant		