

Part Number: CC25-12EWA HIGH EFFICIENCY RED

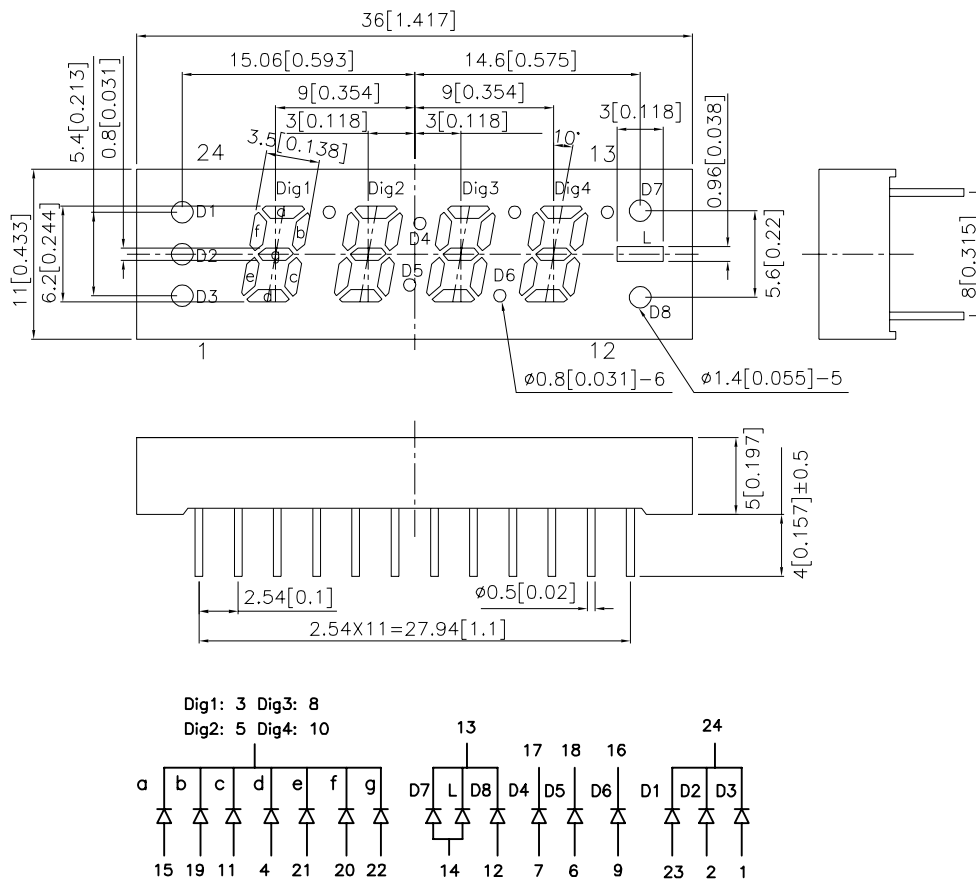
### Features

- 0.25 INCH DIGIT HEIGHT
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- I.C. COMPATIBLE.
- CATEGORIZED FOR LUMINOUS INTENSITY.
- MECHANICALLY RUGGED.
- STANDARD : GRAY FACE, WHITE SEGMENT.
- RoHS COMPLIANT.

### Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange 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. Specifications are subject to change without notice.



## Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
CC25-12EWA	HIGH EFFICIENCY RED(GaAsP/GaP)	WHITE DIFFUSED	1200	6400	Common Cathode

Note:

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

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter		Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength		High Efficiency Red	627		nm	IF=20mA
$\lambda_D$ [1]	Dominant Wavelength		High Efficiency Red	625		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width		High Efficiency Red	45		nm	IF=20mA
C	Capacitance (Per Segment)		High Efficiency Red	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage (Per Segment)	Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D2,D3D4,D5,D6,D8	High Efficiency Red	2.0	2.5	V	IF=20mA
		D7,L					
IR	Reverse Current (Per Segment)	Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D2,D3D4,D5,D6,D8	High Efficiency Red		10	uA	VR = 5V
		D7,L					

Notes:

1. Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

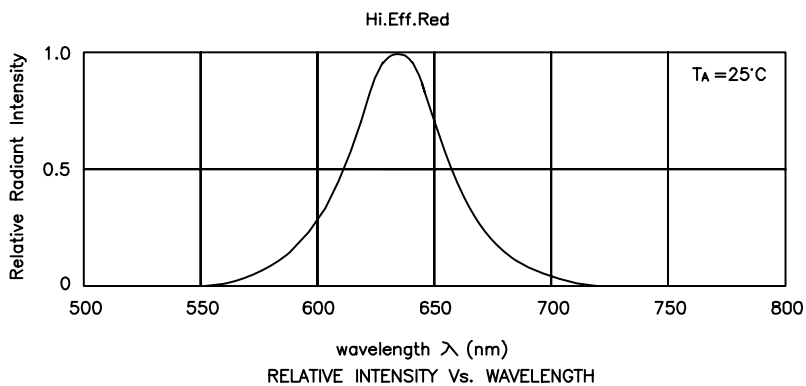
## Absolute Maximum Ratings at TA=25°C

Parameter		High Efficiency Red	Units
Power dissipation (Per Segment)	Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D2,D3D4,D5,D6,D8	75	mW
	D7,L	150	
DC Forward Current (Per Segment)	Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D2,D3D4,D5,D6,D8	30	mA
	D7,L	60	
Peak Forward Current [1] (Per Segment)	Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D2,D3D4,D5,D6,D8	160	mA
	D7,L	320	
Reverse Voltage (Per Segment)	Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D2,D3D4,D5,D6,D8	5	V
	D7,L		
Operating / Storage Temperature		-40°C To +85°C	
Lead Solder Temperature [2]		260°C For 3-5 Seconds	

Notes:

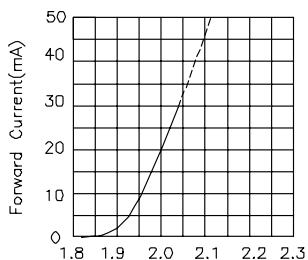
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 2mm below package base.

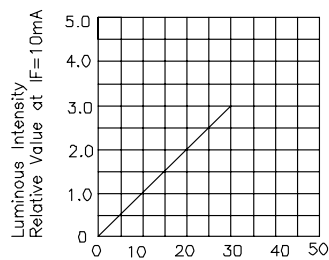


## High Efficiency Red

## CC25-12EWA



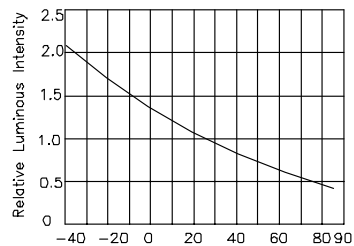
Forward Voltage(V)  
FORWARD CURRENT Vs  
FORWARD VOLTAGE



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



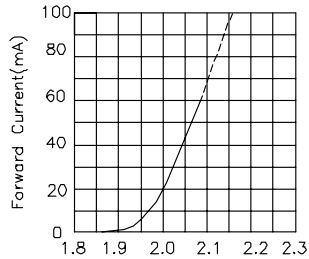
Ambient Temperature  $T_A$  (°C)  
FORWARD CURRENT  
DERATING CURVE



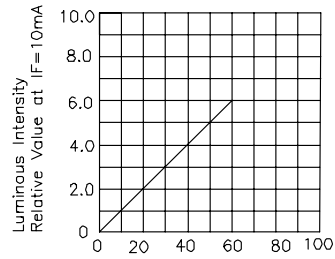
Ambient Temperature  $T_A$  (°C)  
LUMINOUS INTENSITY Vs.  
AMBIENT TEMPERATURE

# Kingbright

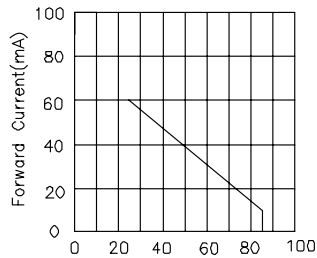
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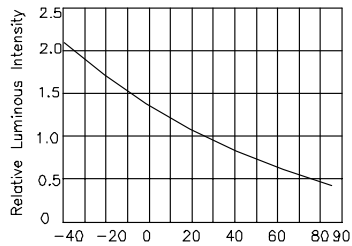
Forward Voltage(V)  
FORWARD CURRENT Vs  
FORWARD VOLTAGE



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



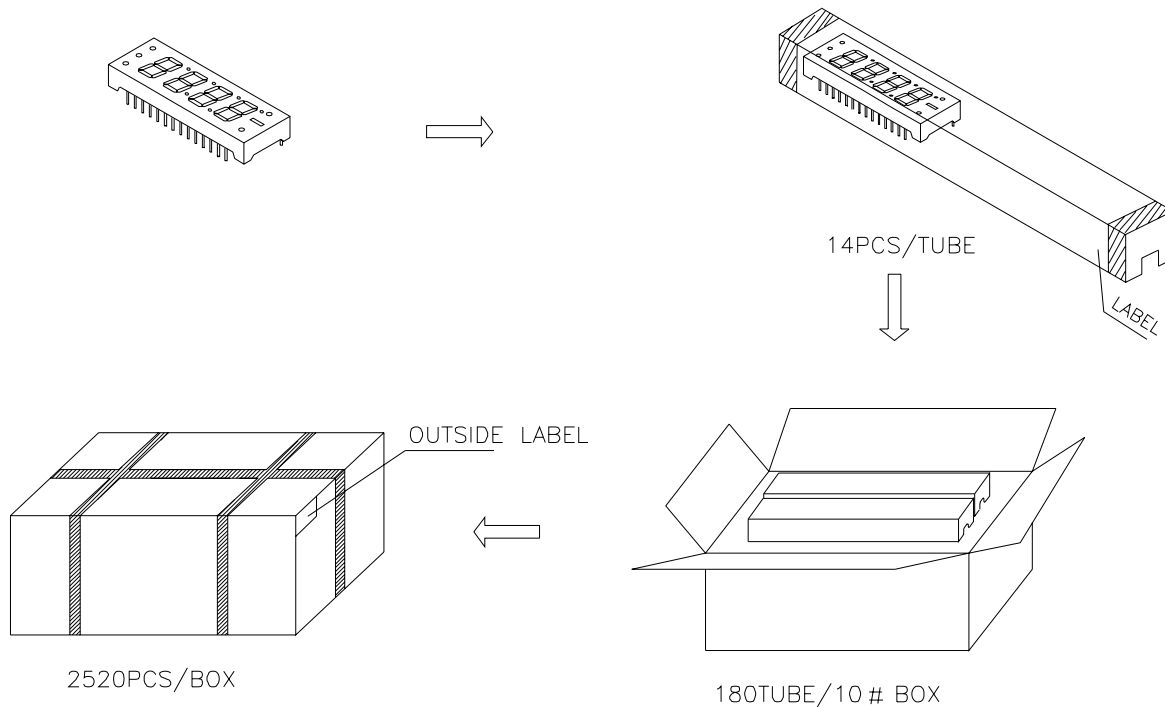
Ambient Temperature  $T_A$  (°C)  
FORWARD CURRENT  
DERATING CURVE



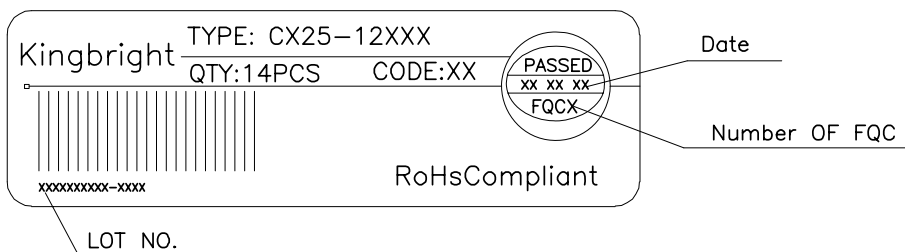
Ambient Temperature  $T_A$  (°C)  
LUMINOUS INTENSITY Vs.  
AMBIENT TEMPERATURE

## PACKING & LABEL SPECIFICATIONS

## CC25-12EWA



Inside LABEL Paste On The IC-tube



Outside LABEL Paste On The Box

