

HVR-3433EES

3433 PLCC6

Products Series

High luminous efficiency, consistency, stability and reliability, it is mainly used in automobile applications.

- PPA
- 50% I_v 120
- 623nm
- AEC-Q102 & IEC 60810

Features

- Package

Ordering Information

	Luminous Intensity I _v @ I _f =140mA	Ordering Code
Type HVR-3433EES- XXXX - XX - XXXX Brightness Color Forward Voltage	3.55 -9.00 cd	XXXXXX

- | | | |
|-----------------------------------|---|-------------|
| | 4 | |
| HVR-3433EES- <u>CBEA</u> -XX-XXXX | | CB DA DB EA |
- | | | |
|---|---|--|
| | 4 | |
| 4 | | |
- | | | |
|----------------------------------|---|-------------|
| | 4 | |
| HVR-3433EES-XXXX-XX- <u>3A4B</u> | | 3A 3B 4A 4B |

Note

- **Brightness Grouping**
 Only one brightness group will be packed in each reel. Please refer to page #4 for details.
 E.g.: HVR-3433EES-CBEA-XX-XXXX, means only one bin of CB, DA, DB or FA is in each reel.
- **Color Groups**
 Please refer to page #4 for details.
- **Forward Voltage Groups**
 Only one forward voltage group will be packed in each reel. 458.88 304.82 Tm(#) TJE Tm /14 0 T10ET .

Information on Label

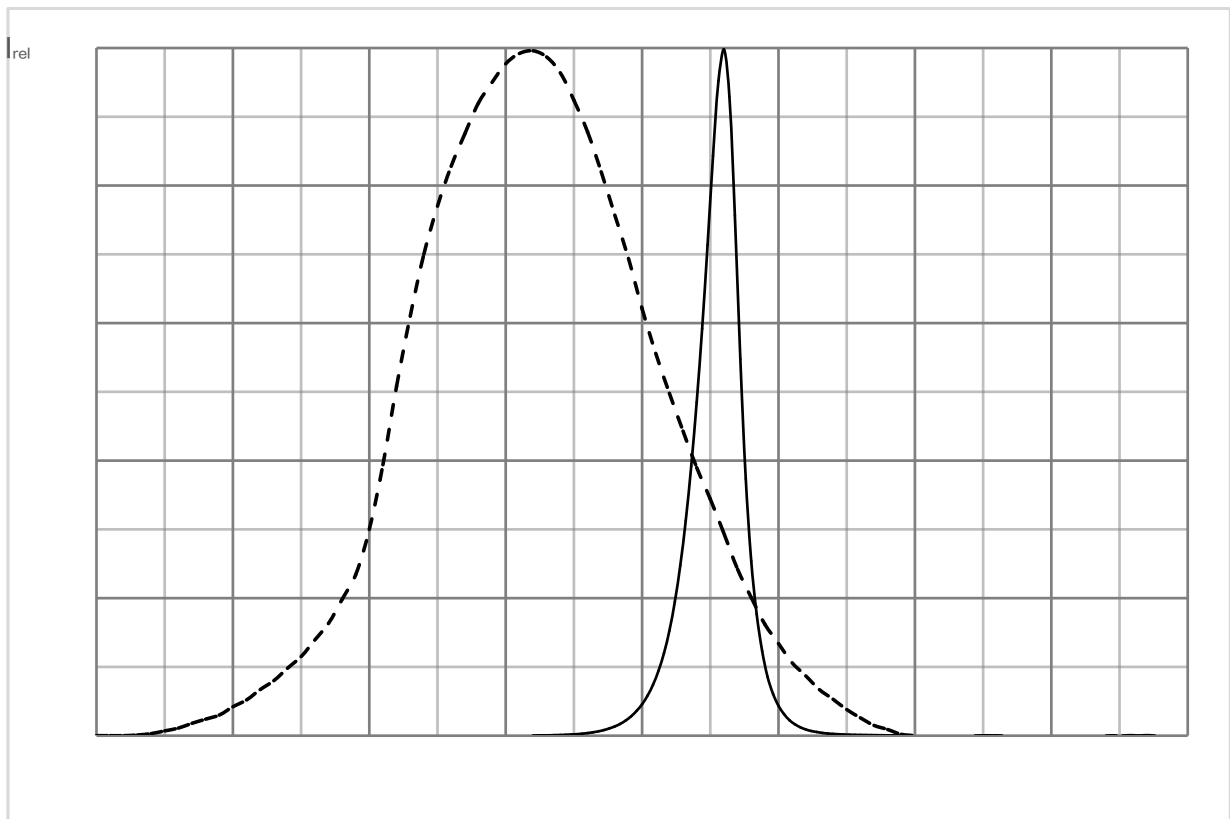
E.g. DA-1-3A

Brightness	Color	Forward Voltage
DA	1	3A

$$- V(\lambda) =$$

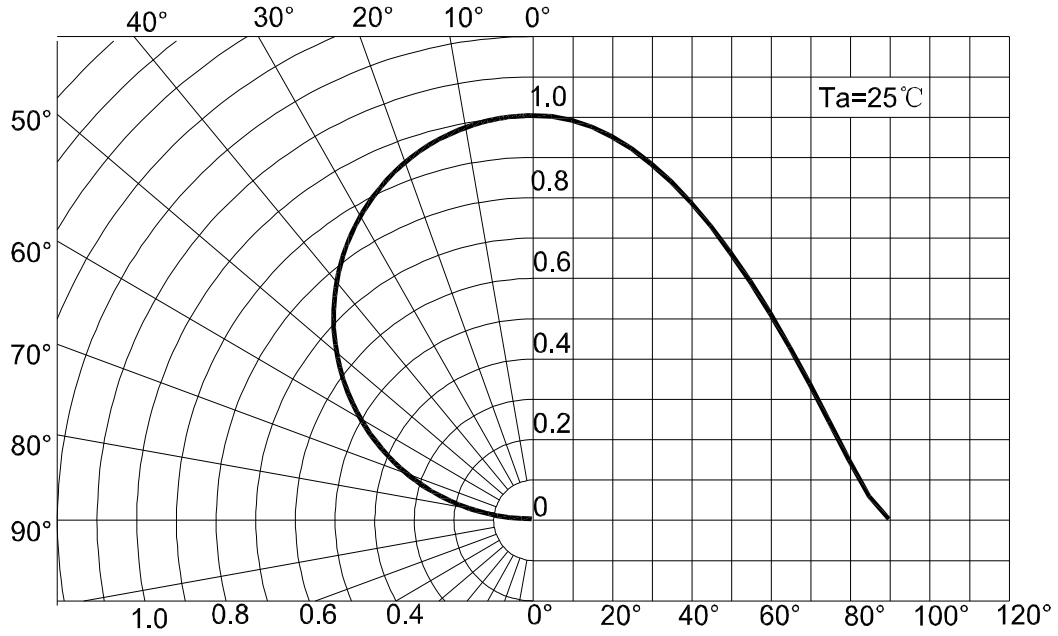
Relative Spectral Emission - $V(\lambda)$ = Standard Eye Response Curve

$$I_{rel} = f(\lambda); T_s \quad I_f = 140 \text{ mA}$$



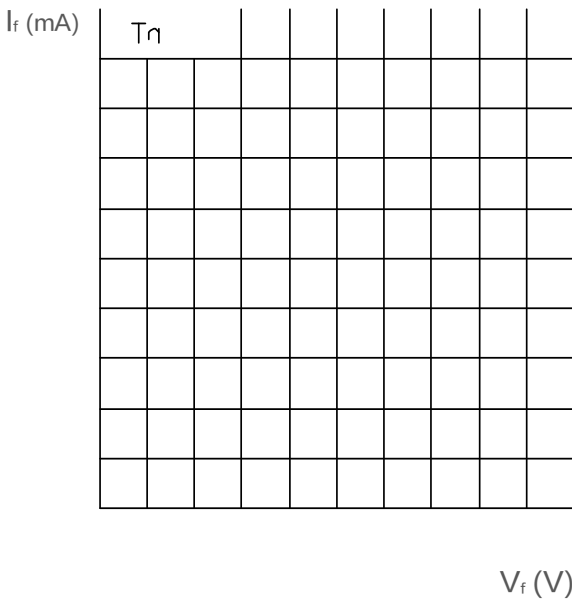
Radiation Characteristics

$I_{rel} = f(\theta) \quad T_s = 25$



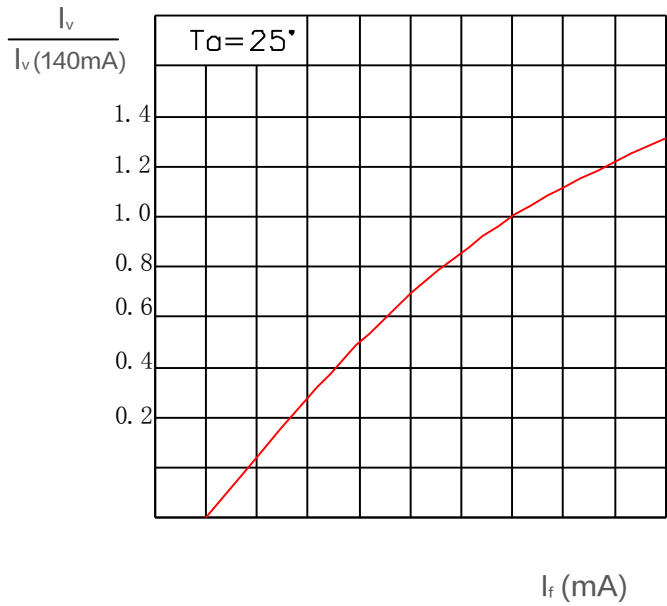
Forward Current

$I_f = f(V_f); T_a$



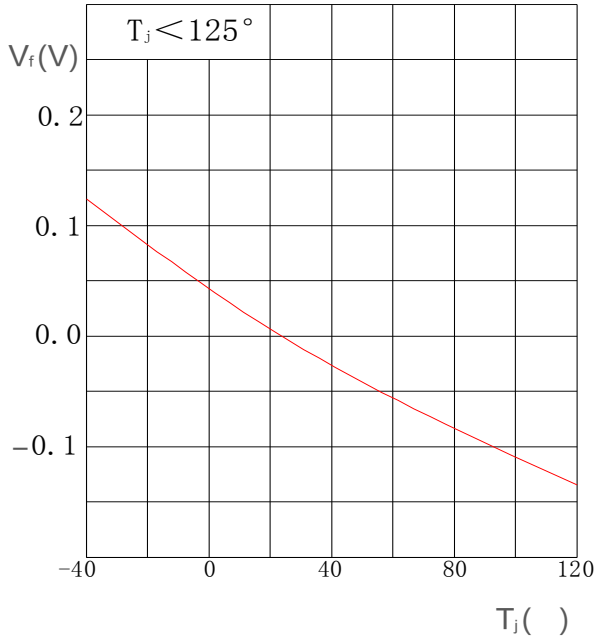
Relative Luminous Intensity

$I_v/I_v(140\text{ mA}) = f(I_f); T_a$



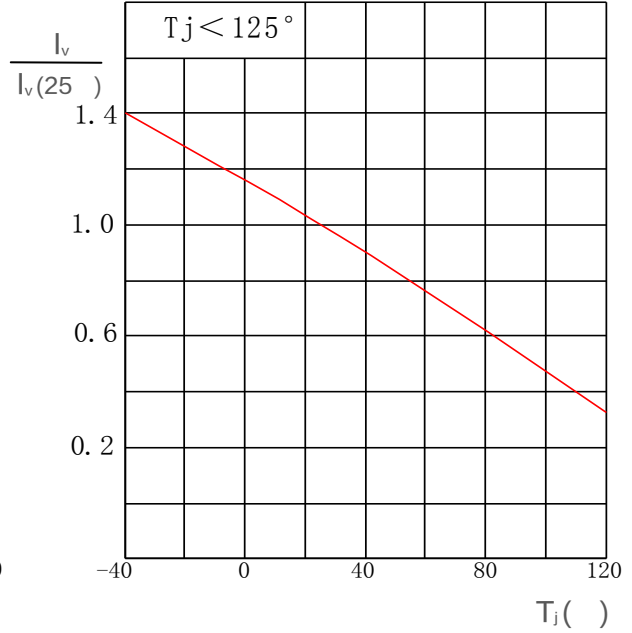
Relative Forward Voltage

$V_f = V_f - V_f$; $I_f = 140 \text{ mA}$



Relative Luminous Intensity

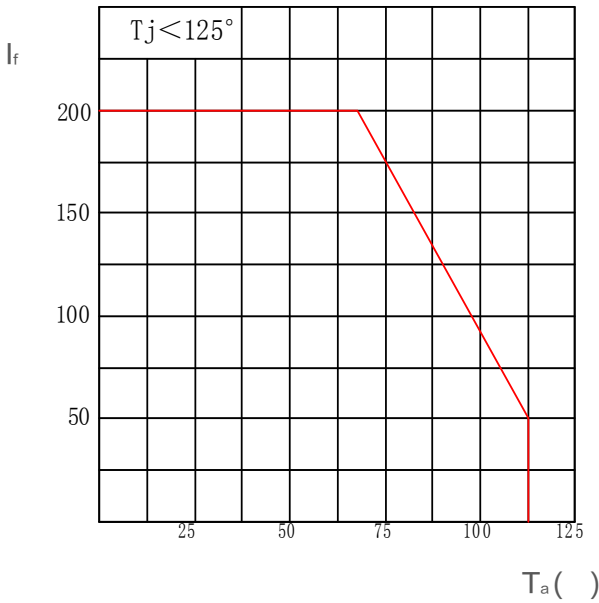
I_v/I_v ; $I_f = 140 \text{ mA}$



Solder Point Temperature

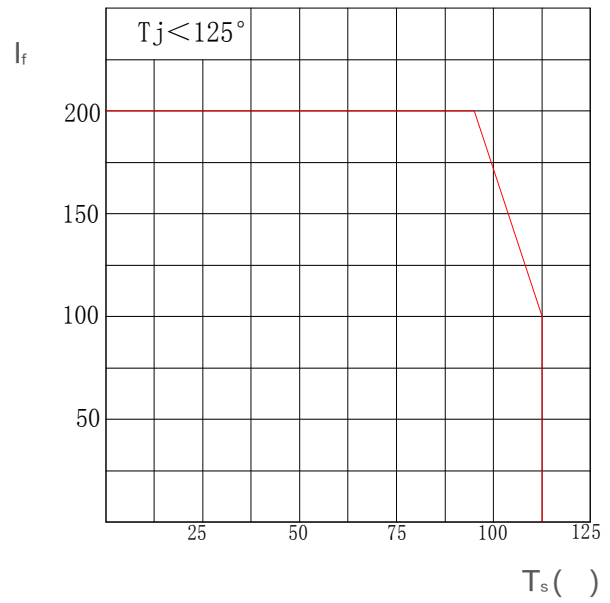
Ambient Temperature vs. Forward Current

$I_f = f(T_a)$

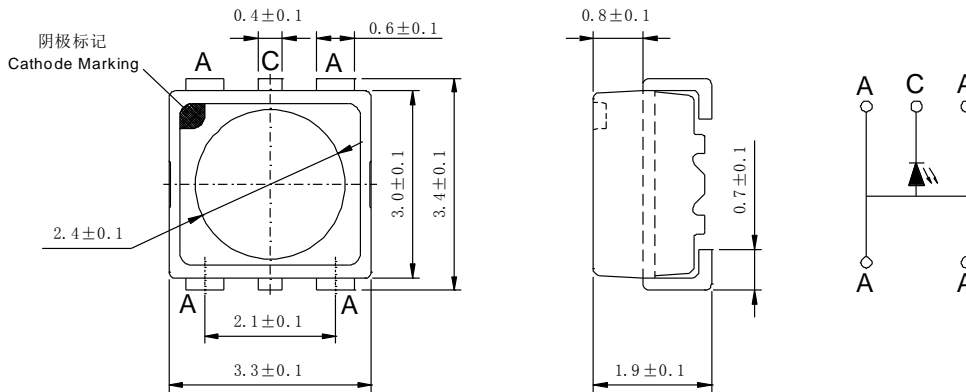


vs. Forward Current

$I_f = f(T_s)$



Package Outline



■ 40mg

■ Class 3B

- : 1) H₂S , 336 IEC 60068-2-43)
 2) IEC 60068-2-60 4: 10ppb H₂S, 200ppb SO₂, 200ppb NO₂, 10ppb Cl₂)

NOTE

■ Approximate Weight: 40mg

■ Mark: Cathode

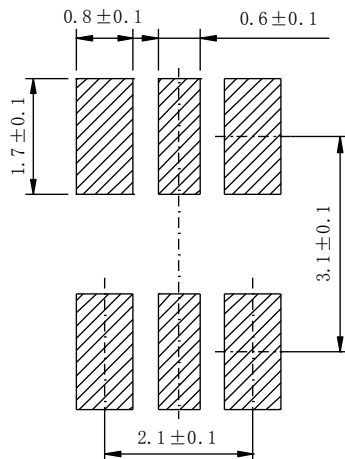
■ Corrosion test: Class 3B

Test conditions: 1) H₂S test , 15ppm, 336hours
 (Standards IEC 60068-2-43)

2) Flowing

(Standards IEC 60068-2-60 test method 4: 10ppb H₂S, 200ppb SO₂, 200ppb NO₂, 10ppb Cl₂)

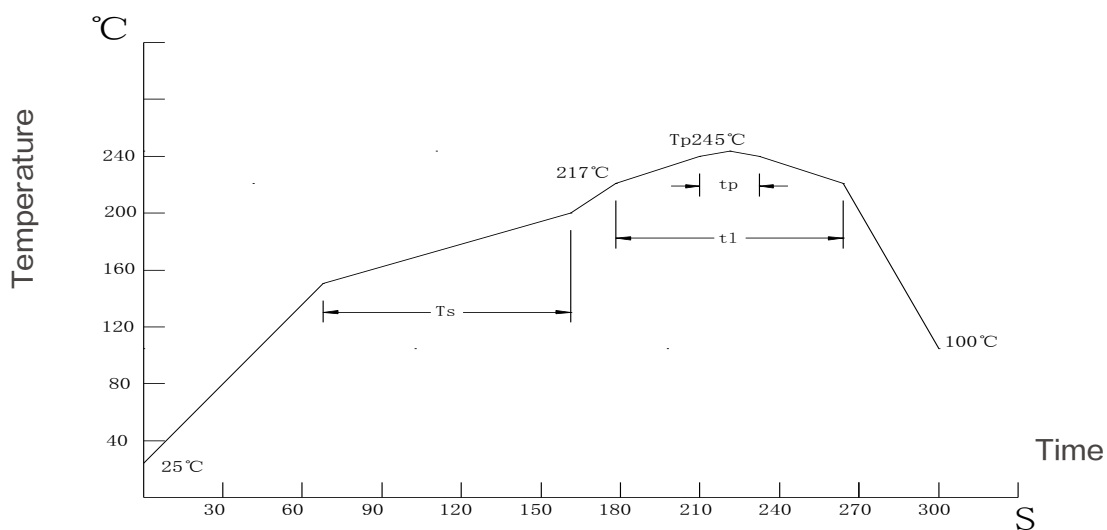
Recommended Solder Pad



NOTE

■ Package not suitable for ultrasonic cleaning

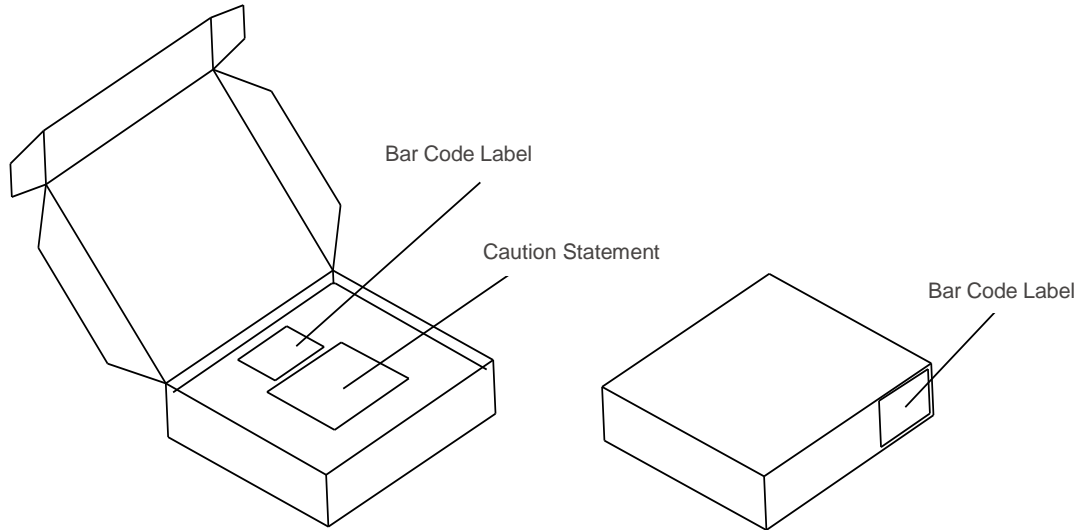
Reflow Soldering Profile



Profile Feature	Symbol	Pb-Free (SnAgCu) Assembly			Unit
		min.	rec.	max.	
Ramp-up Rate to Preheat 25 -150	-	-	2	3	/s
Time T_{smin} to T_{smax}	T_s	60	100	120	s
Ramp-up Rate to Peak T_{smax} to T_p	-	-	2	3	s
Liquidus Temperature	T_l	-	217	-	-
Time above Liquidus Temperature	t_l	-	80	100	s
Peak Temperature	T_p	-	245	260	-
Time within 5 of the Specified Peak Temperature	t_p	10	20	30	s
Ramp-down Rate T_p to 100	-	-	3	6	s
Time 25 to T_p	-	-	-	480	s

Barcode-Product-Label (BPL)

Transportation Packing and Materials



Dimensions of Transportation Box (mm)

Width	Length	Height
256 5	223 5	62 5
256 5	223 5	124 5

:			
:			
	8ms	0.05V	0.1V
	GUM K=3		
	25ms	0.5nm	1nm
	GUM K=3		
	25ms	8%	11%
	GUM K=3		

Glossary

Typical Values: Actual values of each product may differ from these statistical values .

Tolerance of Measure: Unless otherwise noted in drawing, tolerances are specified with +/-0.1mm.

Forward Voltage: The forward voltage is measured during a current pulse of typically 8 ms,

GUM with a coverage factor of k = 3).

Wavelength: The wavelength is measured at a current pulse of typically 25 ms,

GUM with a coverage factor of k = 3).

Brightness: Brightness values are measured during a current pulse of typically 25 ms,

with a coverage factor of k = 3).

Special Statement: The final interpretation of this specification shall be vested in Honglitronic, in the case of ambiguity, the Chinese version shall prevail.