
KB3128R64 (KLB-320 R-12-T)

1. Descriptions

The KB3128R64 (KLB-320 R-12-T) is a SMD type form package Red LED Technology: InGaAlP

2. Features

- ◆ Small Footprint Surface Mount Package (3.1 L × 2.8 W × 3.2 H [mm])
- ◆ Forward Voltage(VF) from 2.1 to 2.5V @ Forward Current(IF)=20mA
- ◆ Operation Temperature from -20℃ to +85℃
- ◆ Soldering methods : IR reflow soldering
- ◆ Taping : 8 mm conductive black carrier tape & antistatic clear cover tape

3. Application

- ◆ Automotive : audio and watch back light
- ◆ Indoor Display Modules
- ◆ Signal and symbol luminaire
- ◆ Auto Focus

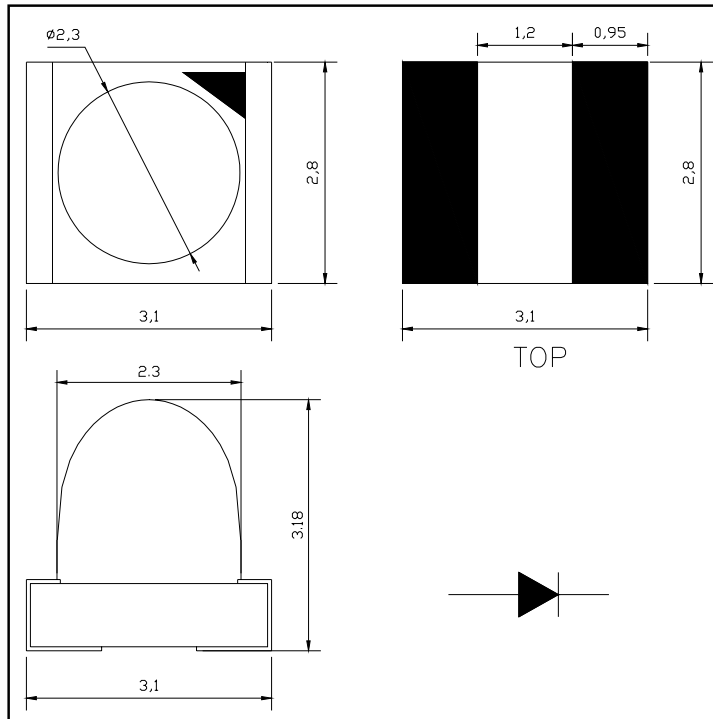
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When using this product, would you please refer to the latest specifications.

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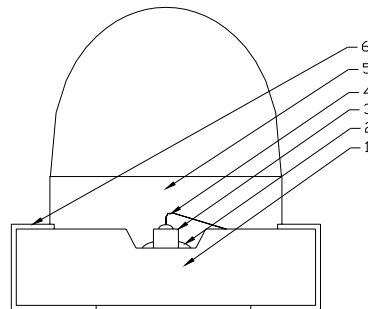
4. Outline Dimensions and Material Descriptions

◆ Outline Dimensions

Unit : [mm]



◆ Material Descriptions



No.	ITEM	Material
①	Package	PCB
②	Paste	Ag Epoxy
③	LED Chip	InGaAlP
④	Wire	Au
⑤	EMC	Clear Epoxy
⑥	Lead	Cu

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5. Absolute Maximums

ITEM	Symbol	MIN	MAX	Unit	Conditions
Forward Current	I_F	-	30	mA	
Peak Forward Current* ¹	I_{FP}	-	100	mA	
Power Dissipation	P_D	-	80	mW	
Reverse Voltage	V_R	-	5	V	
Operating Temperature	Topr	-20	85	°C	
Storage Temperature	Tstg	-30	85	°C	
Soldering Temperature* ²	Tsd		250	°C	5 Sec

*1. Duty Ratio : 1/10, @1 kHz

*2. Soldering time : 5 Sec

6. Electro-Optical Characteristics ($T_A = 25^\circ\text{C}$)

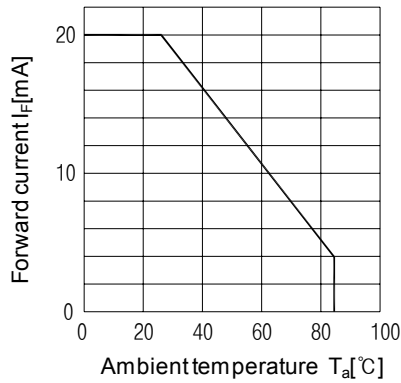
ITEM	Symbol	MIN	TYP	MAX	Unit	Conditions
Forward Voltage	V_F	-	2.1	2.5	V	$I_F=20\text{mA}$
Intensity	I_V	3	5	-	cd	$I_F=20\text{mA}$
Dominant Wavelength	W_D	-	640	-	nm	$I_F=20\text{mA}$
Reverse Current	I_R	-	-	100	μA	$V_R=5\text{V}$
FWHM	$\Delta\lambda$	-	15	-	nm	$I_F=20\text{mA}$
Half angle	$\Delta\theta$		± 6		deg	$I_F=20\text{mA}$

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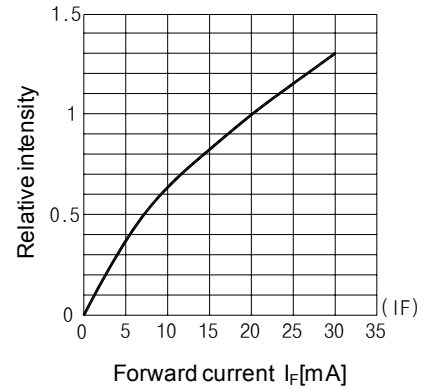
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7. Characteristic Graphs

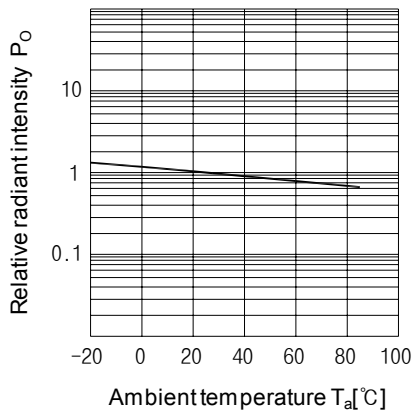
Forward current vs. Ambient temperature



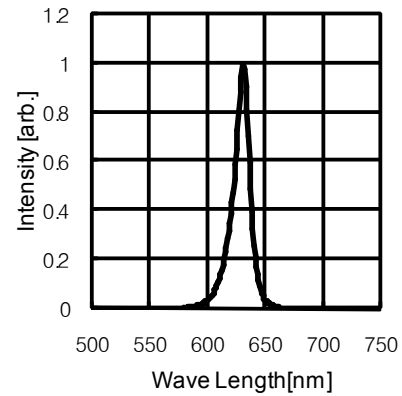
Radiant Intensity vs. Forward current



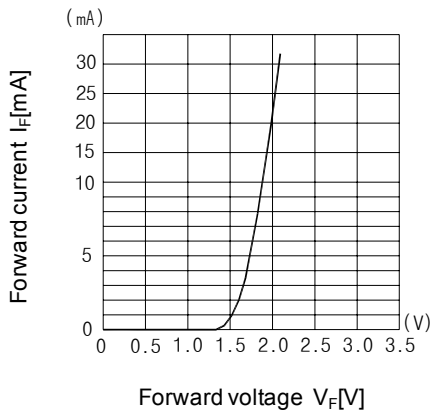
Relative radiant intensity vs. Ambient temperature



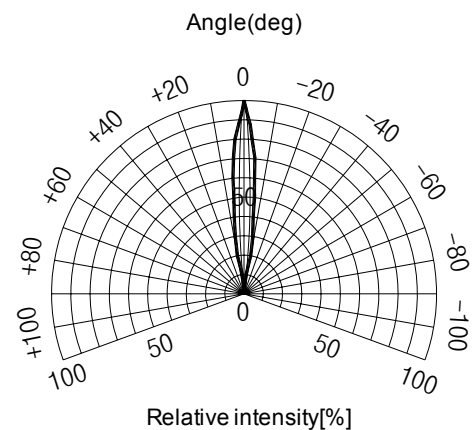
Relative intensity vs. Wavelength



Forward current vs. Forward voltage



Radiant Pattern



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