
KB3128O60 (KLB-320 O-12-T)

1. Descriptions

The KB3128O60 (KLB-320 O-12-T) is a SMD type form package Orange LED Technology: InGaAlP

2. Features

- ◆ Small Footprint Surface Mount Package (3.1 L × 2.8 W × 3.2 H [mm])
- ◆ Forward Voltage(V_F) from 2.2 to 2.8V @ Forward Current(I_F)=20mA
- ◆ Operation Temperature from -20°C to +85°C
- ◆ 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

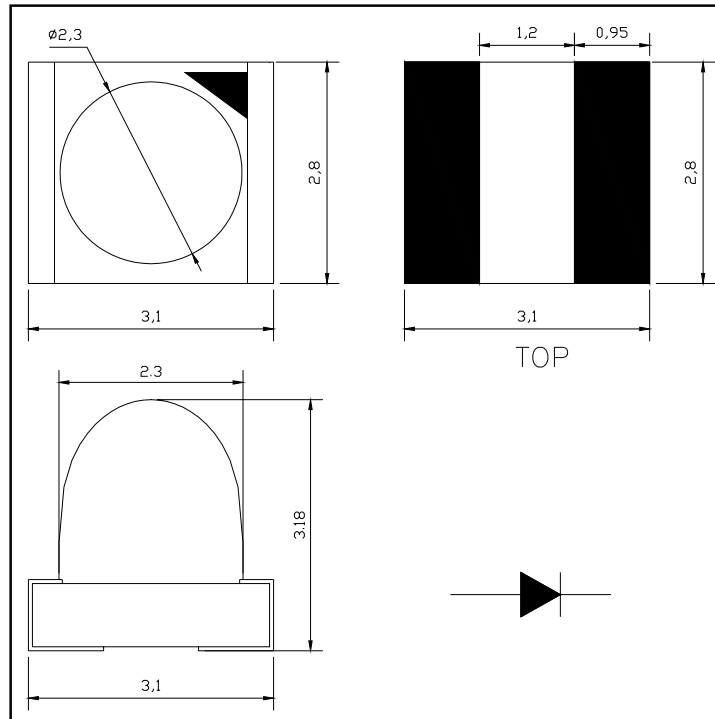
The contents of this data sheet are subject to change without advance notice for the purpose of improvement.
When using this product, would you please refer to the latest specifications.

KB3128O60 (KLB-320 O-12-T)

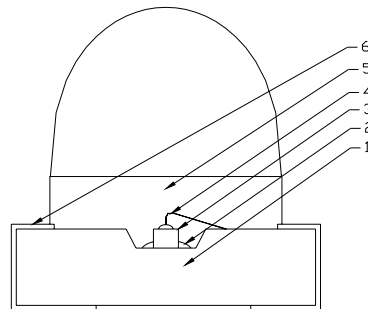
4. Outline Dimensions and Material Descriptions

◆ Outline Dimensions

Unit : [mm]



◆ Material Descriptions



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

The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

KB3128O60 (KLB-320 O-12-T)

5. Absolute Maximums

ITEM	Symbol	MIN	MAX	Unit	Conditions
Forward Current	I_F	-	50	mA	
Peak Forward Current* ¹	I_{FP}	-	100	mA	
Power Dissipation	P_D	-	160	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 $\leq 1/10$, @1 kHz

*2. Soldering time ≤ 5 Sec

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

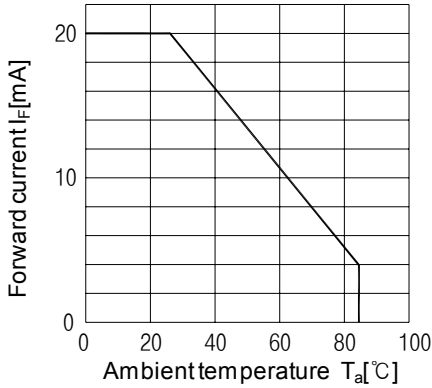
ITEM	Symbol	MIN	TYP	MAX	Unit	Conditions
Forward Voltage	V_F	-	2.2	2.8	V	$I_F=20\text{mA}$
Intensity	I_V	10	20	50	cd	$I_F=20\text{mA}$
Dominant Wavelength	W_D	600	609	620	nm	$I_F=20\text{mA}$
Reverse Current	I_R	-	-	100	μA	$V_R=5\text{V}$
FWHM	$\Delta\lambda$	-	15	-	nm	$I_F=20\text{mA}$
Half angle	$\Delta\theta$		± 6		deg	$I_F=20\text{mA}$

The contents of this data sheet are subject to change without advance notice for the purpose of improvement.
When using this product, would you please refer to the latest specifications.

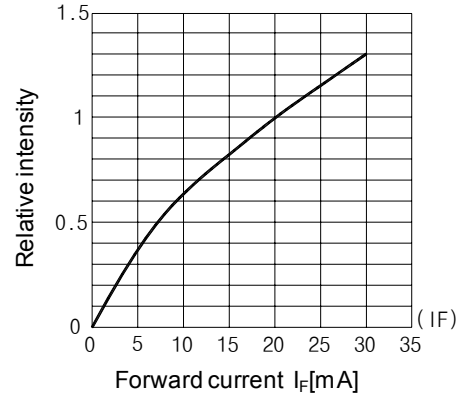
KB3128O60 (KLB-320 O-12-T)

7. Characteristic Graphs

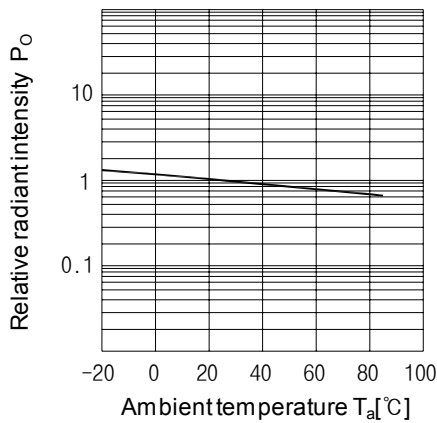
Forward current vs. Ambient temperature



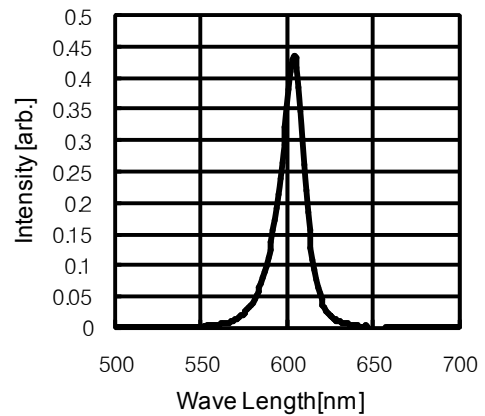
Radiant Intensity vs. Forward current



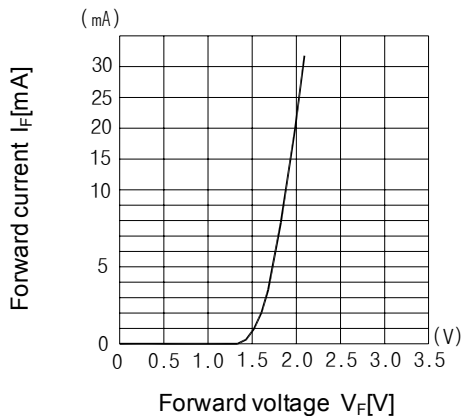
Relative radiant intensity vs. Ambient temperature



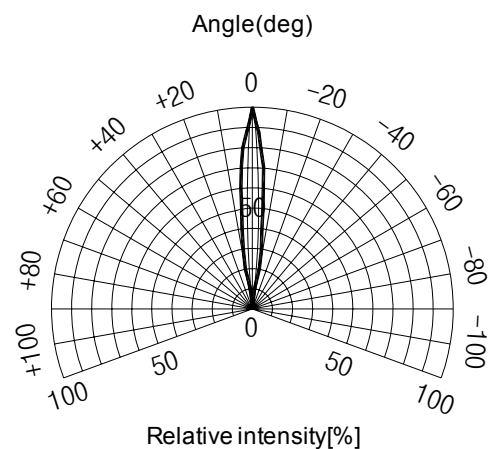
Relative intensity vs. Wavelength



Forward current vs. Forward voltage



Radiant Pattern



The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.