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EVERCORE®

SPECIFICATION

Customer: _____

Model: FH1917-1313J40W32H-KM2

Application : Meat

Print Date: _____

Manufacturer confirmation			Customer confirmation		
Formulate	Audit	Approval	Tester	Audit	Approval

High quality COB lighting ---Create a healthy, comfortable, intelligent and humanistic lighting environment

*Specifications are subject to change without prior notice;

*Foshan Evercore Optoelectronic Technology Co., Ltd. has the right to interpret the specifications

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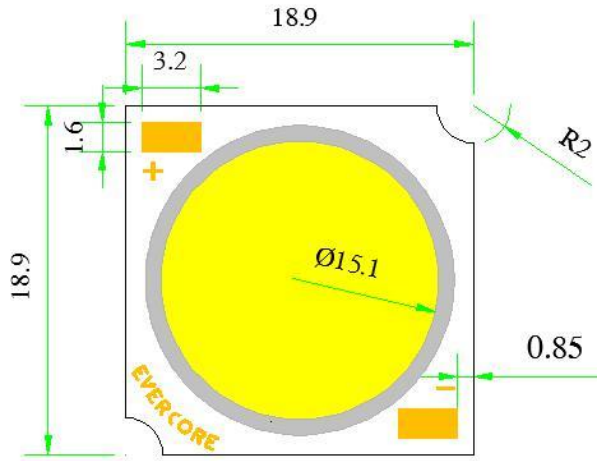
➢ Application

导轨灯 Tracking Light	射灯 Spot Light	帕灯 Par Light	球泡 Bulb Light	筒灯 Down Light
				

➢ Product dimensions



Equivalent-circuit (13 parallels 13 series)

*Unit : mm, tolerance±0.2 unless stated otherwise

➢ Product characteristics

1) Good consistency of light color, high flux , high efficiency;
2) Low thermal resistance, good thermal stability;
3) Strong compatibility, easy to install and use;
4) High reliability;
5) Applied with RoHS standard;
6) EVERCORE standards.

➢ Basic parameters

Model	CCT	Ra	R9	Luminous flux(LM)			Typ. Lumens (LM/W) T_J=25℃	Typ. current (mA)	Thermal resistance Rj(℃/W)
		Min.	Min.	T_J=85℃		T_J=25℃			
				Min.	Typ.	Typ.			
FH1917-1313J40W32H-KM2	3200K	90	50	2295	2494	2772	70	1100	0.375

Note：device tolerance 1) for luminous flux:±7%　　2）Voltage±5%

3)device tolerance for color coordinate:±0.002　　4）Ra/R9±2

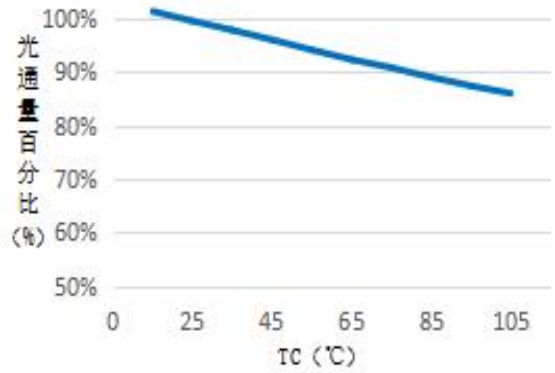
➢ Limit parameters

Parameters	Symbol	Min	Typ	Max	Unit
Forward V	Vf	34	36.7	42	V
Forward A	If	-	1100	2990	mA
Power	Pi	-	39.6	125.5	W
Junction Temp	Tj	-	-	150	℃
Attractions(HBM)	-	-	-	8000	V
View Angle	2θ1/2	-	120	-	degrees
Operation Temperature	Top	-20	-	+85	℃
Storage Temperature	Tst	-40	-	+100	℃
welding temperature	Tsol	-	-	350	℃

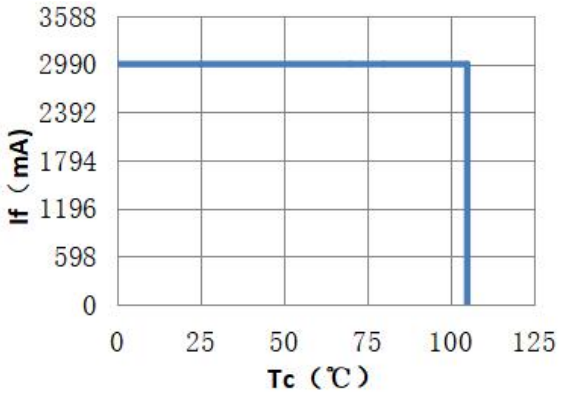
*Ta=25℃ Bonding pad Tc≤85℃. In actual condition，silica gel surface temperature of ≤130℃

➢ Reliability test curve

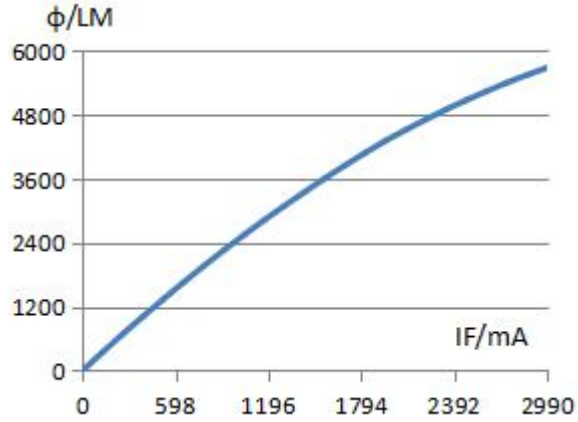
1、Temperature Vs Lumen



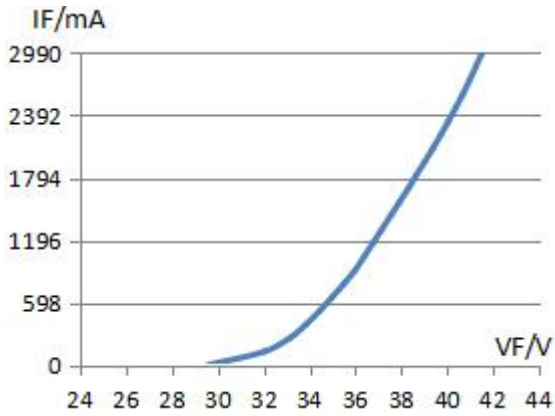
2、TC VS IF curve



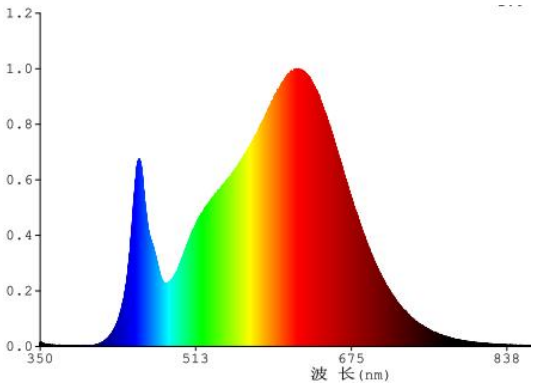
3、Current Vs Lumen



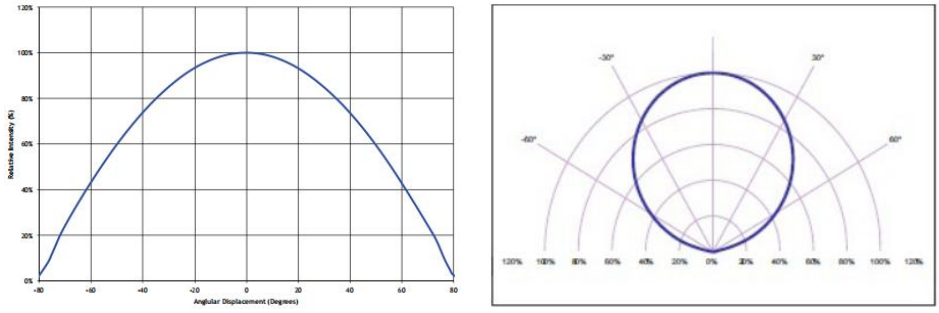
4、Voltage Vs Current



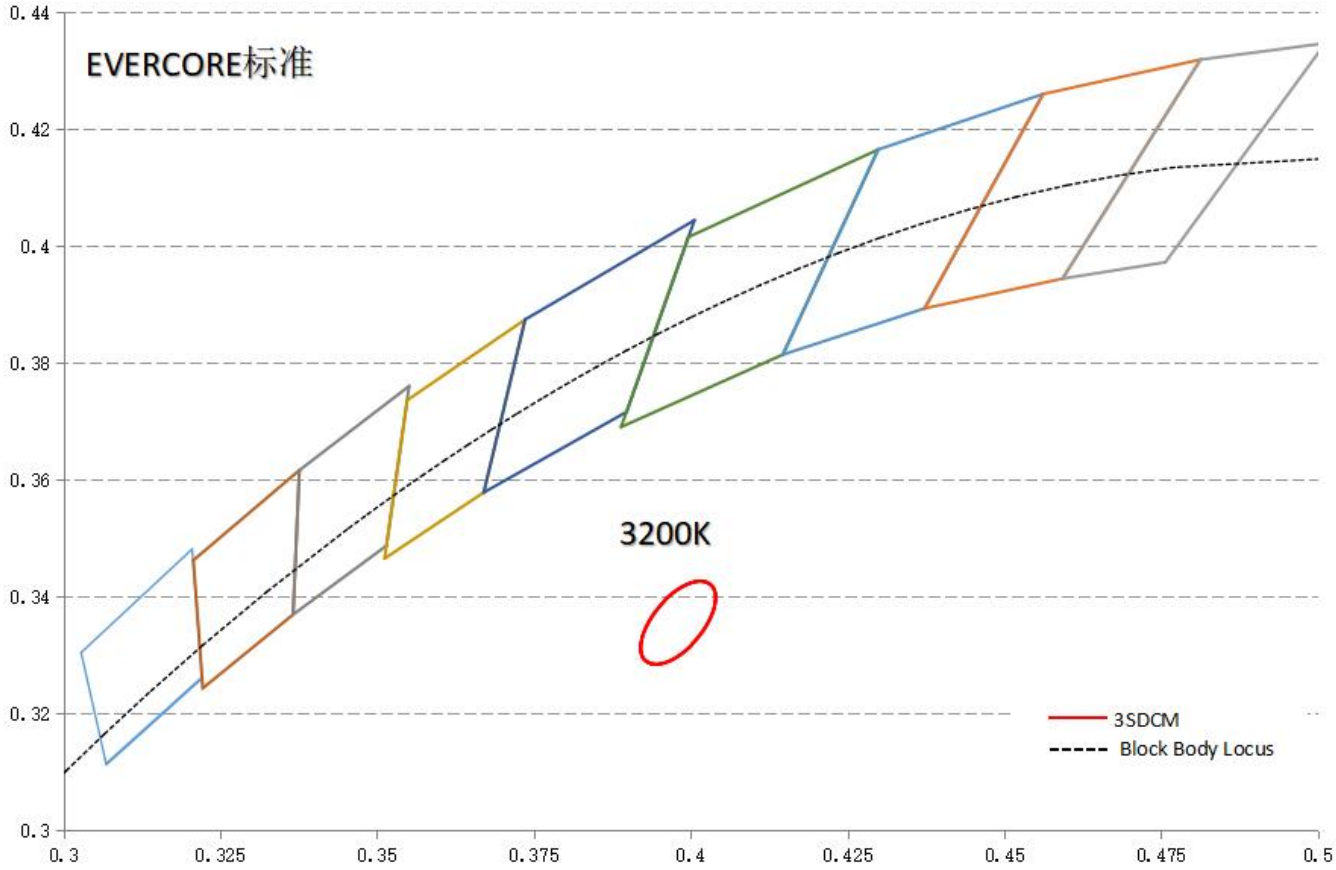
5、 Relative spectral curve



6.7 Light distribution diagram



➢ White bins on CIE-1931



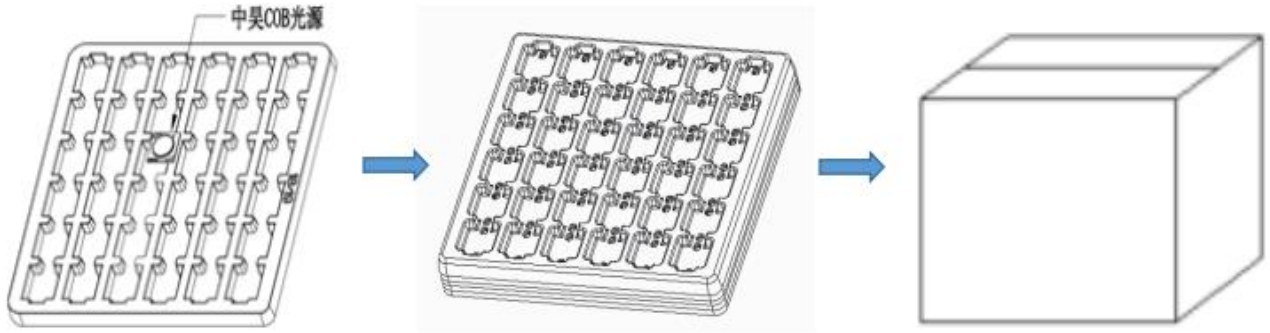
CCT	Chromaticity tolerances	Central point coordinates		long axisa	Short axis b	Rotation AngleΘ
		X	Y			
3200K	3SDCM	0.3980	0.3355	0.00834	0.00408	53.167

Product color sorting test according to standard current, if using with other current, light/color will change.

If customers need specific IEC standards, please let us know before placing an order. We will adjust the standards to meet your special requirements.

➢ Package and label illustration

1）COB Packing : Tray + Anti-static bag with vacuum packing + outer boxes



Plastic Tray　　Vacuum bag packing　　Outer Boxes

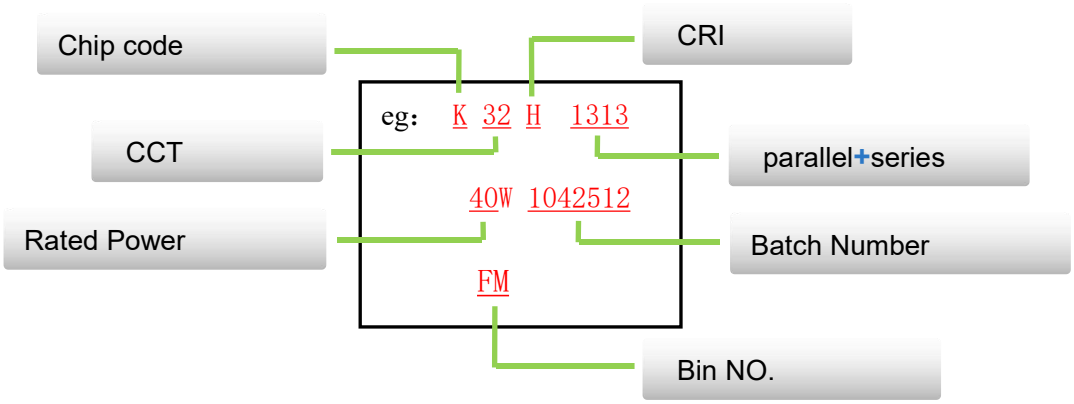
2） Box dimensions

Box Size	Length（cm）	Width（cm）	Height（cm）
Big	38.5	38.5	23
Medium	33	23	19

3）COB package description

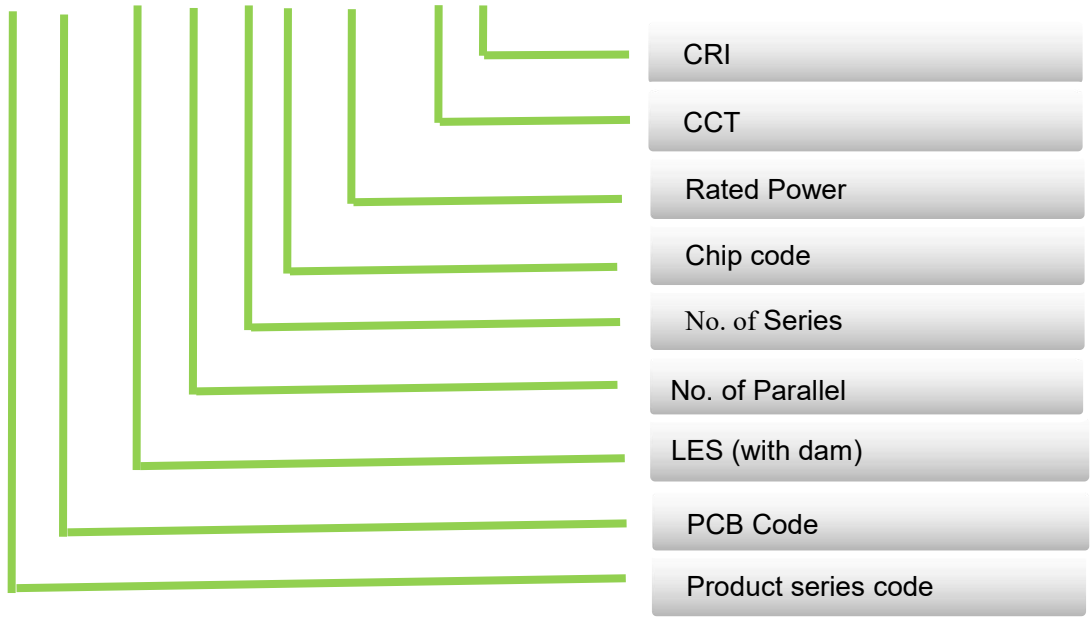
PN base	PCS/BOX	Tray/bag	Pcs/bag	Bag/ pcs/ Big box	Bag/Pcs/Medium box
FH1917	25	5	125	24/3000	10/1250

4）Coding rules for the back printing of COB



➢ Coding rules

F H19 17-13 13 J 40W 32 H-KM2



➢ Test items

Type	Test items	standards	Test conditions	duration	Sample quantity	result
Environment test	Temp. cycle	JEITA ED-4701 100 105	-40℃→25℃→ 100℃→25℃ 30Min 5Min 30Min 5Min	300（300 cycles）	5	0/5
	Storage with high temp	JEITA ED-4701 200 201	Ta=100℃	168/hrs	5	0/5
	Storage with low temp	JEITA ED-4701 200 202	Ta=-40℃	168hrs	5	0/5
Life test	room temp	-	Ta=25℃ @If	1000/3000/6000/hrs	1	0/1
	high temp	-	Ta=85℃ @If	1000/hrs	1	0/1
	high temp and high humidity	-	Ta=85℃ Rh=85% @If	1000/hrs	1	0/1
	High power with Room Temp	-	@1.5*If	720/hrs	1	0/1
	Soldering resistance	IEC62717	@If Tc=85℃ 30s on/30s off	30000cycle	2	0/2

➢ Announcements

1) Storage condition

The storage environment humidity is <60%, the temperature is maintained at 20℃-30℃.Once the COB light sources have been unsealed, please install them within 168H; if it is not used up within 168H, please vacuum it and keep it sealed. After sealing, the effective use period is 1 year.

2) Application notice

When welding, it is recommended to use RVB wire for welding, and the soldering iron should be properly grounded. When manually welding, the temperature of the soldering iron must be below 350 ℃, and the welding time should not exceed 3 seconds. After cooling to room temperature, it can be welded again. Please be careful not to apply external forces (such as pressure, friction, or sharp metal nails) to the surface of the gel or the dam gel to avoid abnormal deformation or breakage of the gold wire.

In order to reduce the contact thermal resistance during assembling, please note that the thermal conductivity paste coating is uniform with proper distribution area , too little thermal conductivity paste or uneven application level is not okay. When using thermal conductive rubber pad, make sure that the base plate and thermal conductive rubber pad are in complete contact after screw installation,No hollow space is allowed.

After welding, please do not let the heat conduction silicon grease, oil... to the luminous surface, dirt can be removed with an air gun, do not use sulfur, chlorine element liquid or washing board water to clean ,Air gun pressure: 0.5mpa, time 1-2 seconds, distance: more than 20cm apart.

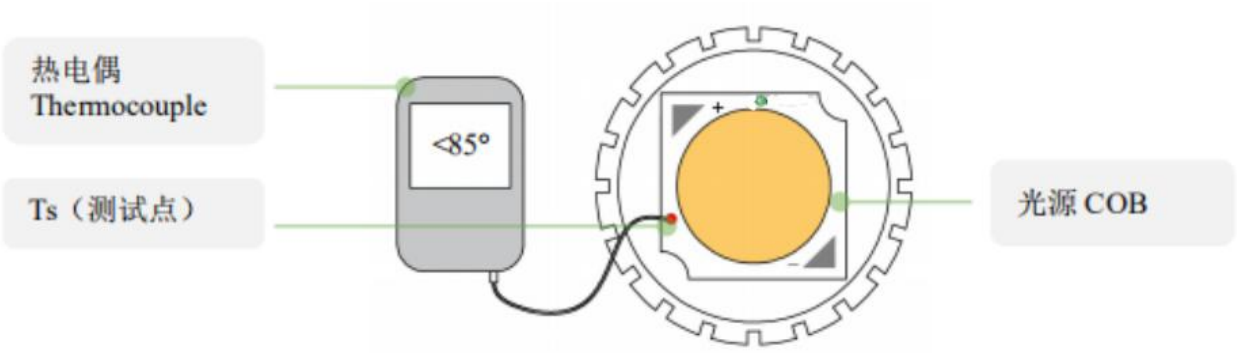
In order to prevent external substances from entering the interior of the LED and causing damage to the LED, the environment and kit used must have a single bromine element content of less than 900PPM, a single chlorine element content of less than 900PPM, a total bromine and chlorine element content of less than 1500PPM, and sulfur and compound components must not exceed 100PPM.

3) Electrostatic protection

This product is sensitive to static electricity, so effective protective measures must be taken when using this product to effectively prevent the damage of LED light source from static electricity and surge. When the high voltage current generated by static electricity exceeds the maximum rating of LED light source, the LED light source will be damaged or even completely invalid. Therefore, Customers should take effective measures to prevent static electricity and surge when using the products. Suggested grounding resistance is 10Ω or less.

4) Over-temperature, over current protection

Do not press the luminous silicon surface at any time to avoid bad effect or even ineffective to the COB. It is recommended to design grounding circuit for the whole lamp design.



The working humidity is between 50% and 80%, and the working environment is between -10℃ and 85℃, otherwise, there will be hidden dangers of electrostatic breakdown and large current impact. When using this product, please ensure that it is used within the maximum rating (maximum current and Tc and glue surface temperature) specified in this specification. Any adverse consequences arising from failure to comply with the maximum rating and description of the product specifications shall not be covered by the warranty.

5) Thermal design

A good use effect of LED light source depends on the thermal resistance of LED light source, external thermal resistance, power loss and ambient temperature.

High junction temperature of LED will affect the light flux and the working life of the light source. Full consideration of these factors is highly recommended in heat dissipation design.