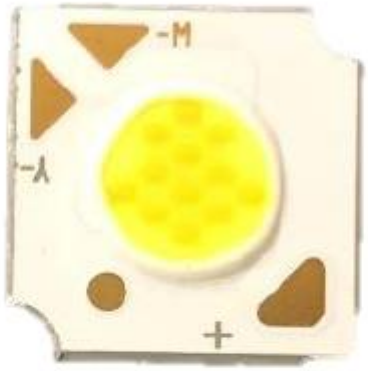
Part No: COB-QUAD-2760W10

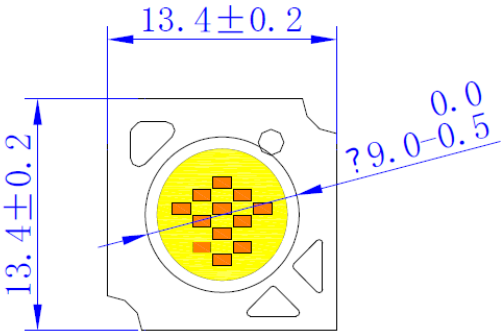


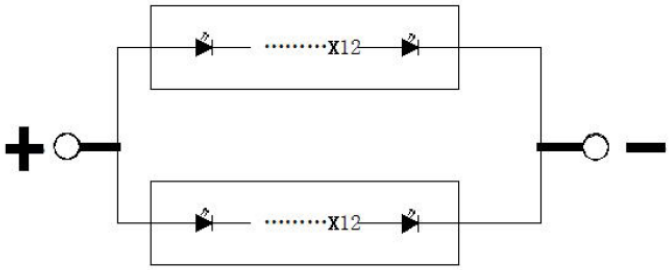
Features

- High brightness、high reliability、long life
- Light angle：120°
- Typical color temperature：2700K/6000K
- Ra ： 80+

Part No: COB-QUAD-2760W10

Outline dimensions & Circuit structure





NOTES:

- All dimensions are millimeter.
- Tolerance is ±0.3mm unless otherwise noted.
- It is strongly recommended that the temperature of TS （Welding plate ） is not higher than 90℃.

Limit parameter（Ta = 25℃）

Parameter	Symbol	Test Condition	Value		Unit
			Min.	Max	
DC Forward Current	IF	----	----	250	mA
Peak Pulse Current	Ipeak	Duty=1/10 1kHz	----	310	mA
Power Dissipation	Pd	----	----	10	W
LED Junction Temperature	TJ	----	----	125	℃
Operating Temperature	Topr	----	-40	+85	℃
Storage Temperature	Tstr	----	-40	+100	℃
ESD Sensitivity	----	HBM	2000	----	V
Soldering Temperature	----	----	350℃ for 5 Seconds max		

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Photoelectric parameters （Ta = 25℃）

CCT	Item	Symbol	Test Condition	Min	Typ	Max	Unit
2700K	Forward Voltage	VF	IF=200mA	--	36	--	V
	Luminous Flux	Φ		670	--	--	lm
	Color Temperature	CCT		2670	2700	2830	K
	General Color Rendering Index	Ra		80	--	--	
	Thermal Resistance	RJ		--	3.1	--	℃/W
6000K	Forward Voltage	VF	IF=200mA	--	36	--	V
	Luminous Flux	Φ		800	--	--	lm
	Color Temperature	CCT		5720	6000	6350	K
	General Color Rendering Index	Ra		80	--	--	
	Thermal Resistance	RJ		--	3.1	--	℃/W

Chromaticity Coordinates Ranks(IF=200mA Ta=25℃)

Stands	Colour tenperature	Center of Coordinates	Long axis	Minor axis	Gradient	Colour tenperature	Explain
	TC	X	Y	a	b	TC	SDCM
ANSI	6500K	0.3123	0.3282	0.00892	0.0038	6500K	4-step MacAdam
	5000K	0.3447	0.3553	0.00822	0.00354	5000K	3-step MacAdam
	4000K	0.3818	0.3797	0.00939	0.00402	4000K	
	3500K	0.4073	0.3917	0.00951	0.00417	3500K	
	3000K	0.4338	0.403	0.00714	0.00408	3000K	
	2700K	0.4578	0.4101	0.00774	0.00411	2700K	
IEC	6500K	0.3130	0.337	0.0089	0.0038	6500K	4-step

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			0	2			MacAdam
	5000K	0.3460	0.3590	0.00822	0.00354	5000K	3-step MacAdam
	4000K	0.3800	0.3800	0.00939	0.00402	4000K	
	3500K	0.4090	0.3940	0.00951	0.00417	3500K	
	3000K	0.4400	0.4030	0.00714	0.00408	3000K	
	2700K	0.4630	0.4200	0.00774	0.00411	2700K	

Code	Colour temperature
W27	2700K
W30	3000K
W35	3500K
W40	4000K
W50	5000K
W60	6000K
W65	6500K

NOTES:

- Our company deliver according to the 3 order macadam ellipses among 2700K-5000K and deliver the 4 order macadam ellipses among 6000K-6500K for above 3 stands.
- Tolerance of measurements of the Forward Voltage is ±2%V
- Tolerance of measurements of the Luminous Flux is ±15%
- Tolerance of measurements of the Color Rendering Ra is ±2
- Chromaticity Coordinates (x,y) is measured with an accuracy of ±0.01
- The center of Coordinates (x,y) is based on C78.377:2008 ANSI reference
- Ellipse refer to IEC 60081:1997
- Ranking at TC=25℃

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Typical curve

Fig. 1 Forward Current (mA) Vs Forward Voltage (V)

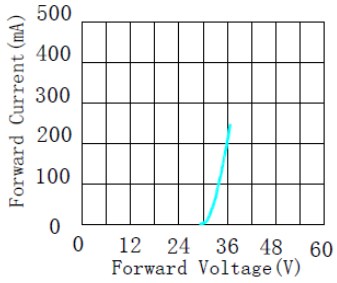


Fig. 2 Relative Intensity Vs Forward Current (mA)

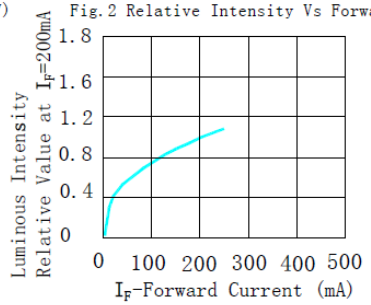


Fig. 3 Forward Current Vs Ambient Temperature

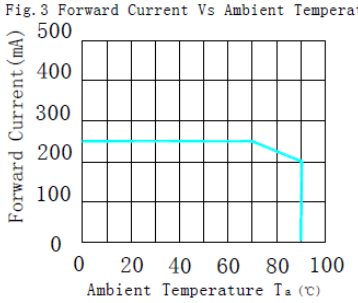
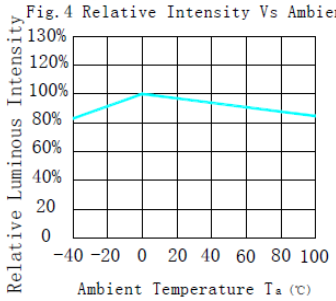
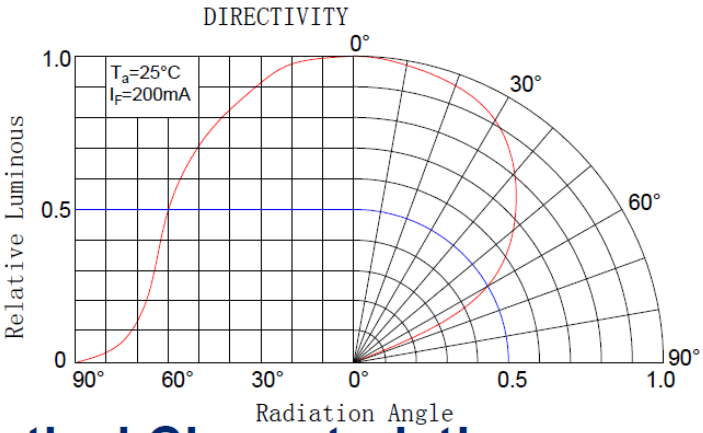


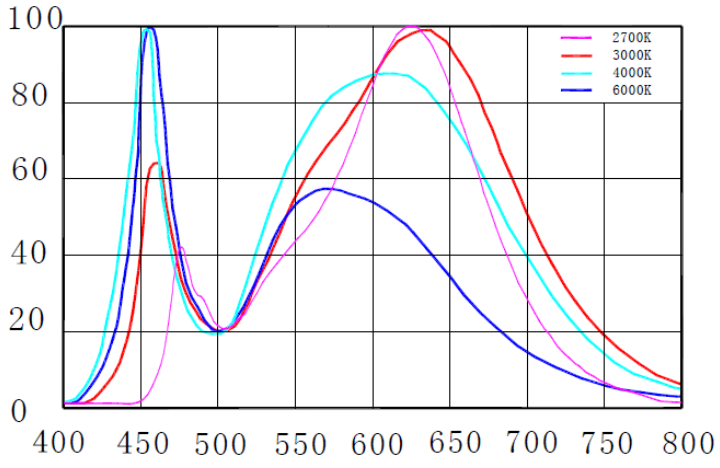
Fig. 4 Relative Intensity Vs Ambient Temperature





Optical Characteristics

Spectrum : CRI(Ra) 80Min. Tj=85℃ If=200mA



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Reliability Tests and Results

Test	Reference Standard	Test Conditions	Test Duration	Units Failed/Tested
Temperature Cycle	JEITA ED-4701 100 105 or MIL-STD-202G	-40℃(30min)∽ 25℃(5min)∽ 100℃(30min)∽ 25℃(5min)or -40℃(30min) ∽ 100℃(30min)	100cycles	0/10
High Temperature Storage	JEITA ED-4701 200 201	T_A=90℃	1000hours	0/10
HighTemperature Humidity Storage	JEITA ED-4701 100 103	T_A=85℃ RH=90%	1000hours	0/10
Low Temperature Storage	JEITA ED-4701 200 202	T_A=-40℃	1000hours	0/10
High Temperature Operating Life	JESD22-A108D	TC=85℃ I_F=200mA	1000hours	0/10
Electrostatic Discharges	JEITA ED-4701 300 304	HBM 2KV 3KΩ 100Pf 3pulses nedative		0/10

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NOTES:
Measurements are performed after allowing the LEDs to return to room temperature Failure Criteria.

Items	Conditions	Failure Criteria
Forward Voltagd (VF)	I_F=600mA	>Initial value x 1.1
Luminous Flux (ΦV)	I_F=600mA	<Initial value x 0.7

Packaging

100PCS