

PRODUCT SPECIFICATION

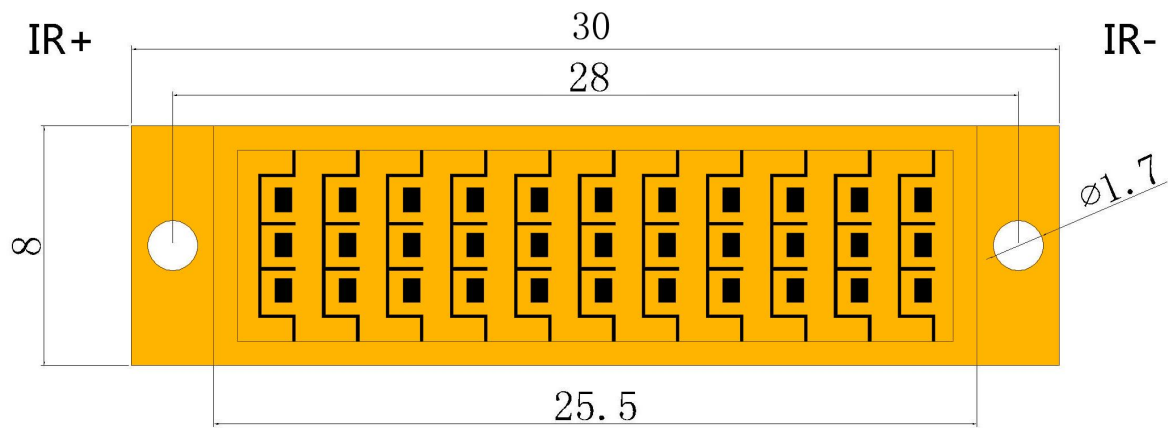


Part No. : JH-33IR14DG4748-TJB-LS940
High Power LED

Catalog

1.Dimensions	P2
2.Electro-optical Characteristics	P3
3.Absolute Maximum Ratings	P3
4.Electro-optic conversion curve	P4
5.Cautions	P5

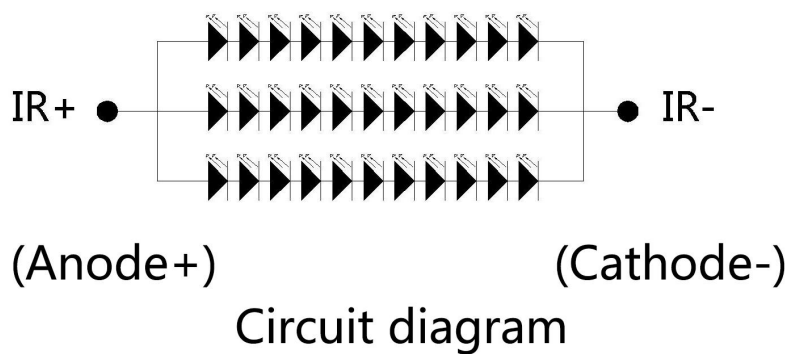
1. Dimensions



Top view



Side view



Notes:

1. All dimensions are in millimeters.
2. Tolerance is $\pm 0.1\text{mm}$ unless otherwise noted.

2. Electro-optical Characteristics

Parameters	Symbol	Conditions	Specification/Rating			Unit
			Min.	Typ.	Max.	
Optical Output Power	POP	Pulse 7.2A 50°C	59.4	66	-	W
Threshold Current	I _{th}	Pulse 50°C	300	900	1500	mA
Operating Current	I _{op}	Pulse 50°C	-	2.4	-	A
Differential resistance	R _s	Pulse 7.2A 50°C	-	0.23	0.5	Ω
Operating Voltage	V _{op}	Pulse 7.2A 50°C	18.7	21.45	24.2	V
Slope Efficiency	η _s	Pulse 7.2A 50°C	0.9	1	-	W/A
Power Conversion Efficiency	PCE	Pulse 7.2A 50°C	40	44	-	%
Wavelength	λ _{peak}	Pulse 7.2A 50°C	932	940	948	nm
Spectral Width (RMS)	Δλ	Pulse 7.2A 50°C	-	-	2.5	nm
Beam Full Divergence (D86)	φ	Pulse 7.2A 50°C	18	21	24	°
Wavelength coefficient	dλ/dT	Pulse	-	0.07	-	nm/°C

Note: The testing condition is 0.3ms-pulse/1%-Duty.

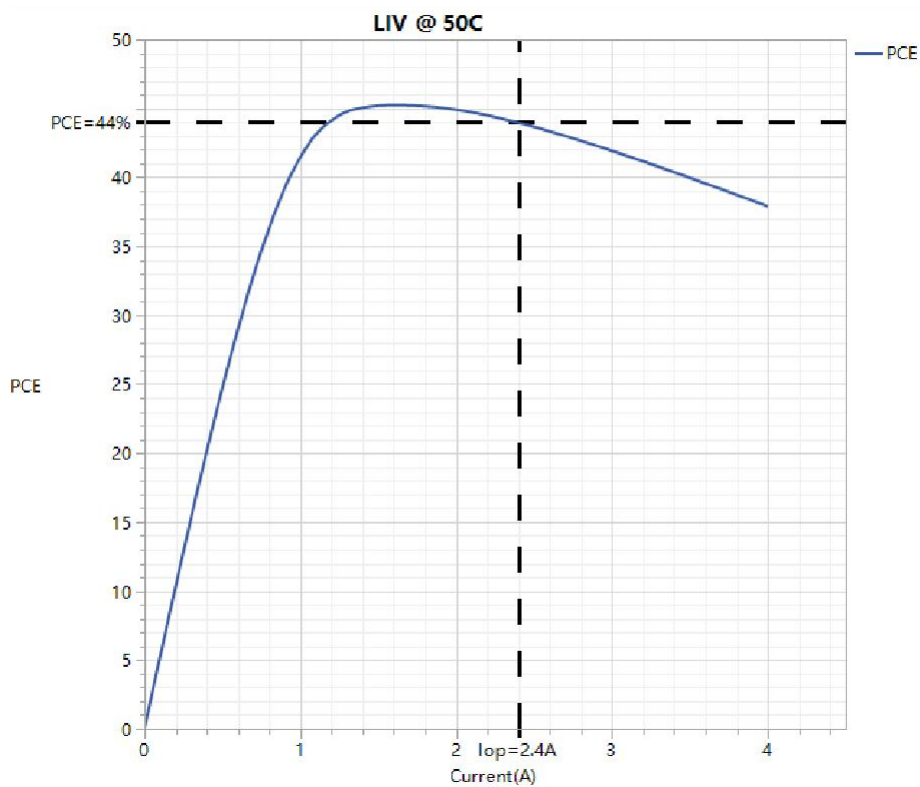
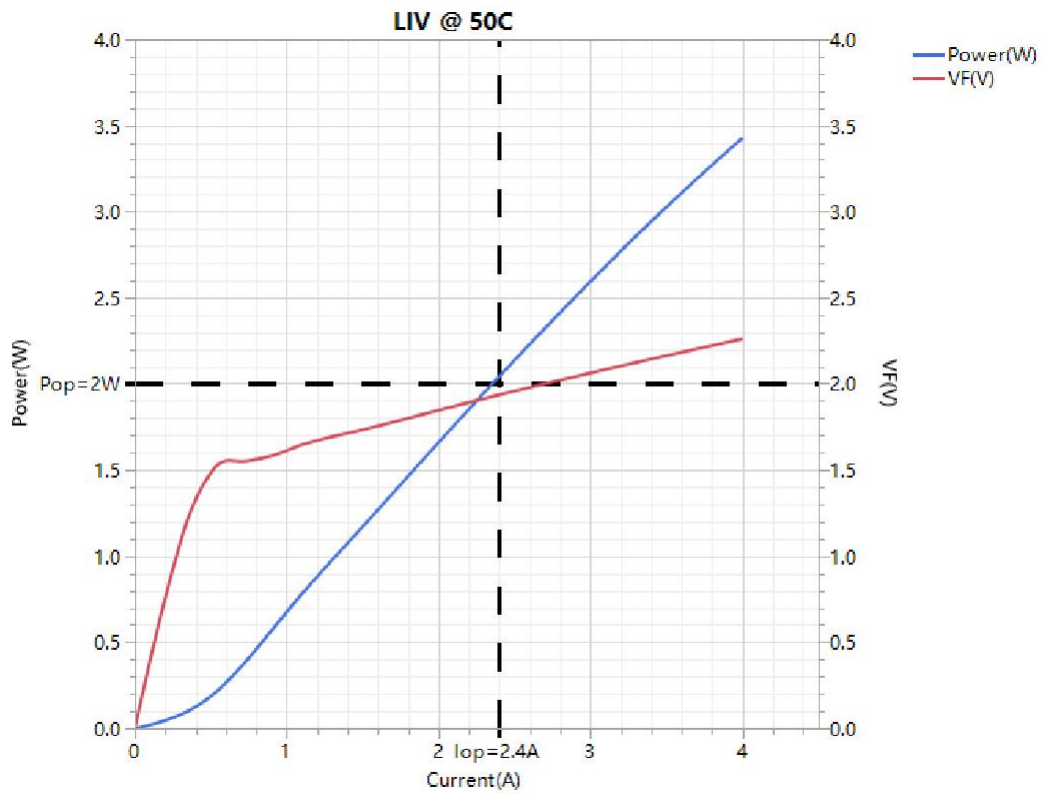
3. Absolute Maximum Ratings

Stresses in excess of the absolute maximum ratings can cause permanent damage to the device. These are absolute stress ratings only. Functional operation of the device is not implied at these or any other conditions in excess of those given in the operational sections of the data sheet. Exposure to absolute maximum ratings for extended periods can adversely affect device reliability.

Parameter	Symbol	Min	Max	Unit
Operating humidity	H _{op}	0	85	%
Operating Temperature	T _{op}	-20	85	°C
Storage Temperature	T _{st}	-40	110	°C
Storage humidity	H _s	0	85	%

4. Electro-optic conversion curve

Typical Performance Curves at 25 °C



5. Cautions

1. Electrostatic Treatment

Do a full range of anti-static measures (such as: anti-static ring, anti-static clothes, machine, equipment grounding wire, etc.)



2. Heat Dissipation

- A、 It is recommend to configure reasonable heat dissipation device for the product.
- B、 The best working temperature range of the product is 40-60°. It is recommended to control the working temperature of the product within a reasonable range.

