



LatticePower

Latticepower green chip LP-SI08B03G-AL[W_xV_yI_z]

Data Sheet

■ FEATURES

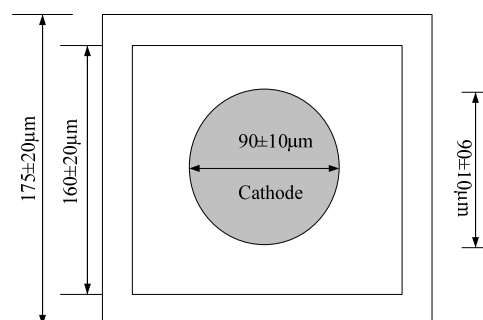
- Single Wire Bond Structure
- All samples are 100% tested and sorted
- High anti-ESD level

■ APPLICATIONS

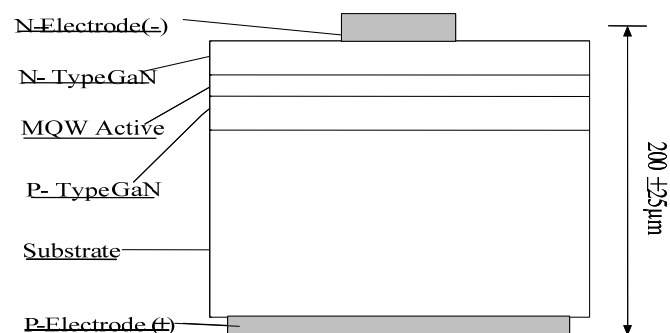
- Indoor and outdoor notice boards and billboards
- General Illumination

■ CHIP DESCRIPTION

Top View



Die Cross Section



OPTICAL AND ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Item	Symbol	Condition		Min	Typ	Max	Unit
Forward Voltage	V _f	I _f =20mA		—	3.3	3.6	V
Reverse Current	I _R	V _r =5V		—	—	1	μ A
Spectral half-width	Δ λ	I _f =20mA		—	35	—	nm
Wavelength	λ D	I _f =20mA	W1	515	—	517.5	nm
			W2	517.5	—	520	
			W3	520	—	522.5	
			W4	522.5	—	525	
			W5	525	—	527.5	
			W6	527.5	—	530	
Luminous Intensity	I _V	I _f =20mA	I ₁	180	—	205	mcd

* All measurements are done with Latticepower's standard testing equipment.

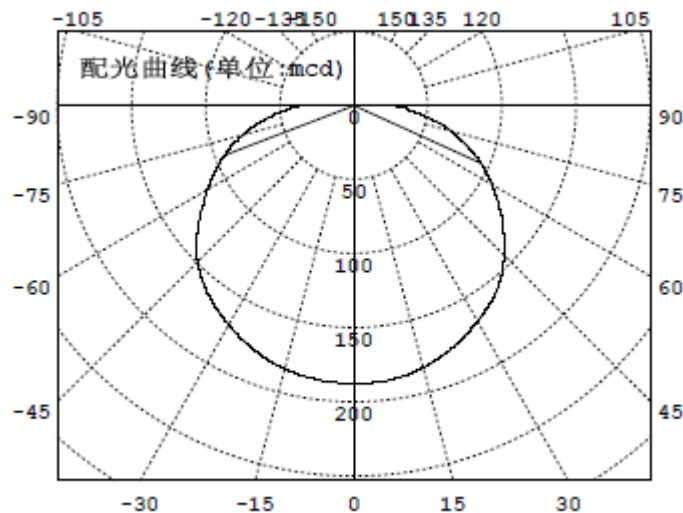
■ ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Item	Symbol	Maximum Rating	Unit
DC Forward Current	I_F	30	mA
Pulse Forward Current (1/10 duty cycle @ 1 kHz)	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{OPR}	-30 to +85	°C
Storage Temperature	T_{STG}	-40--+100	°C

*The above ratings were determined using a T-1 3/4 package .

■ Radiation Pattern

This is a representative radiation pattern for the Si08B03G-AI LED product.
Actual patterns will vary slightly for each chip.

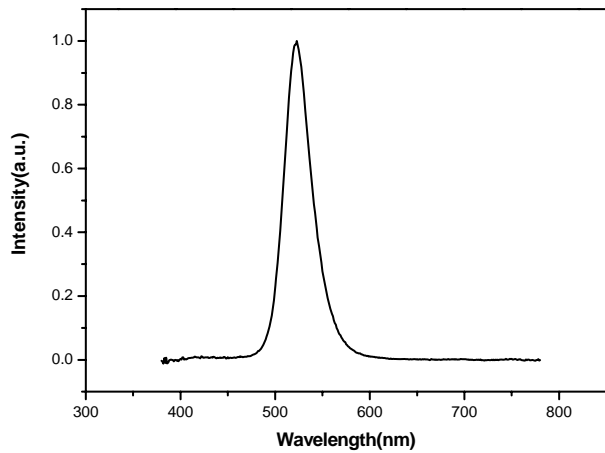


*BARE CHIP $I_f=20\text{mA}$

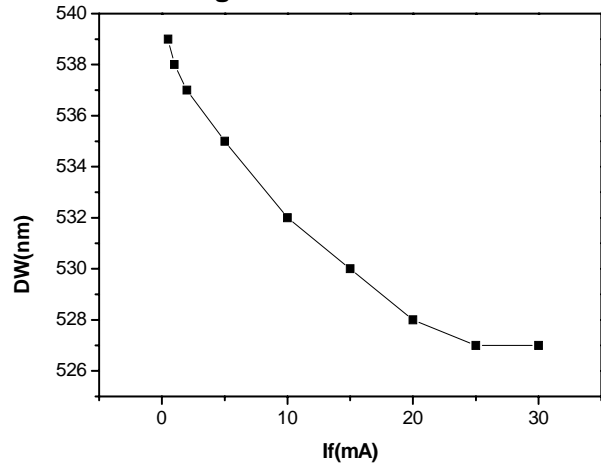
Characteristic Curves

These are representative measurements for the SI08B03G LED product. Actual curves will vary slightly for the various radiant flux and dominant wavelength bins.

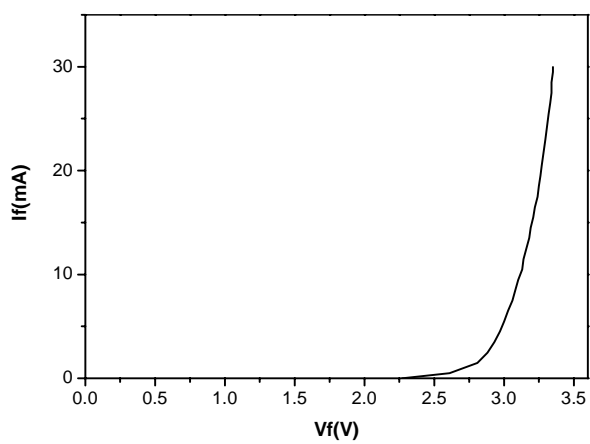
Intensity vs Peak Wavelength



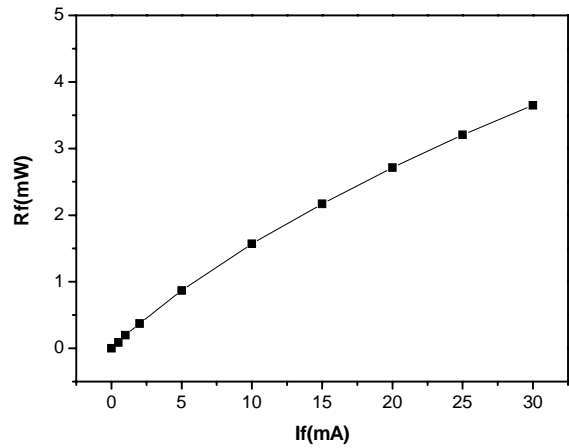
Wavelength Shift vs Forward Current



Forward Current vs Forward Voltage



RF vs Forward Current



*Specifications are subject to change without notice.