



# TOYO LED ELECTRONICS LIMITED

Room 1610, Hong Kong Plaza, 188 Connaught Road West, Hong Kong.

Tel: (852) 2540 7288

Fax: (852) 2517 1797

<http://www.toyo-led.com>

[email: sales@toyo-led.com](mailto:sales@toyo-led.com)



## CODE PG

**Chip Material: InGaN / GaN Pure Green LED Chip**



### ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

PARAMETER	SYMBOL	MAXIMUM RATING	UNIT
Power Dissipation	P <sub>D</sub>	105	mW
Peak Forward Current (1/10 Duty Cycle, 0.1 Ms Pulse Width)	I <sub>PEAK</sub>	135	mA
DC Forward Current	I <sub>F</sub>	25	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature Range	T <sub>A</sub>	-40°C to +85°C	
Storage Temperature Range	T <sub>STG</sub>	-40°C to +85°C	
Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C			

### ELECTRICAL OPTICAL CHARACTER AND CURVES (Ta = 25°C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	LOCATION	TEST CONDITION
Forward Voltage	V <sub>F</sub>	3.00	3.20	3.50	V	Per Chip	I <sub>F</sub> = 20mA
Luminous Intensity	I <sub>v</sub>	260.0	285.0	310.0	mcd	Per Chip	I <sub>F</sub> = 20mA
Peak Emission Wavelength	λ <sub>p</sub>	-	530	-	nm	Per Chip	I <sub>F</sub> = 20mA
Dominant Emission Wavelength	λ <sub>d</sub>	520	522.5	525	nm	Per Chip	I <sub>F</sub> = 20mA
Spectral Line Half-Width	Δλ <sub>1/2</sub>	-	30	-	nm	Per Chip	I <sub>F</sub> = 20mA
Capacitance	C	-	45	-	pF	Per Chip	V <sub>F</sub> = 0V; f = 1MHz
Reverse Current	I <sub>R</sub>	-	-	2	uA	Per Chip	V <sub>R</sub> = 5V

**Note:**

- 1. Luminous intensity tolerance is ±10%;**
- 2. Dominant Emission Wavelength tolerance is ±5%;**
- 3. Recommend to use 4 chips or below in the parts.**



# TOYO LED ELECTRONICS LIMITED

Room 1610, Hong Kong Plaza, 188 Connaught Road West, Hong Kong.

Tel: (852) 2540 7288

Fax: (852) 2517 1797

<http://www.toyo-led.com>

email: [sales@toyo-led.com](mailto:sales@toyo-led.com)



## CODE PG

### ■ Typical Electro-Optical Characteristic Curve:

FIG. 1 Forward Current Vs. Forward Voltage

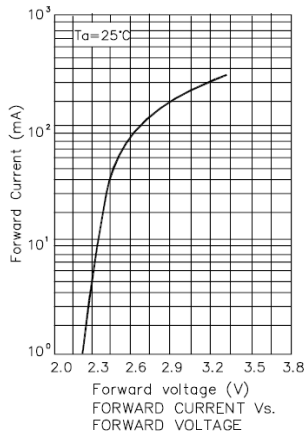


FIG. 2 Relative Intensity Vs. Forward Current

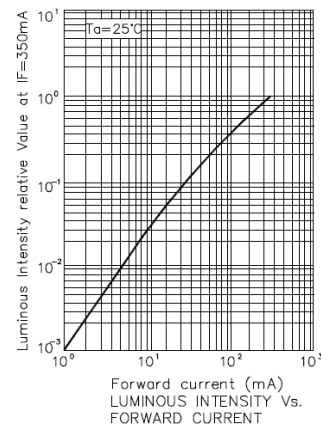


FIG. 3 Forward Current Vs. Temperature

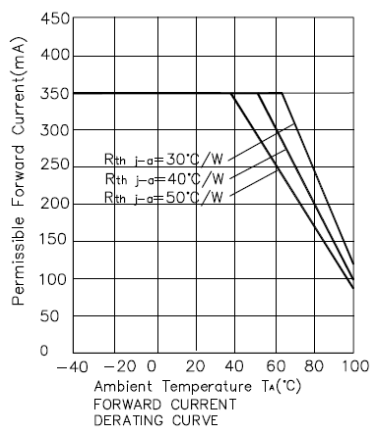


FIG. 4 Relative Intensity Vs. Temperature

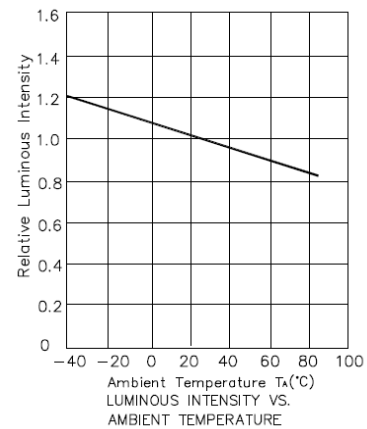


FIG. 5 Relative Intensity Vs. Wavelength

