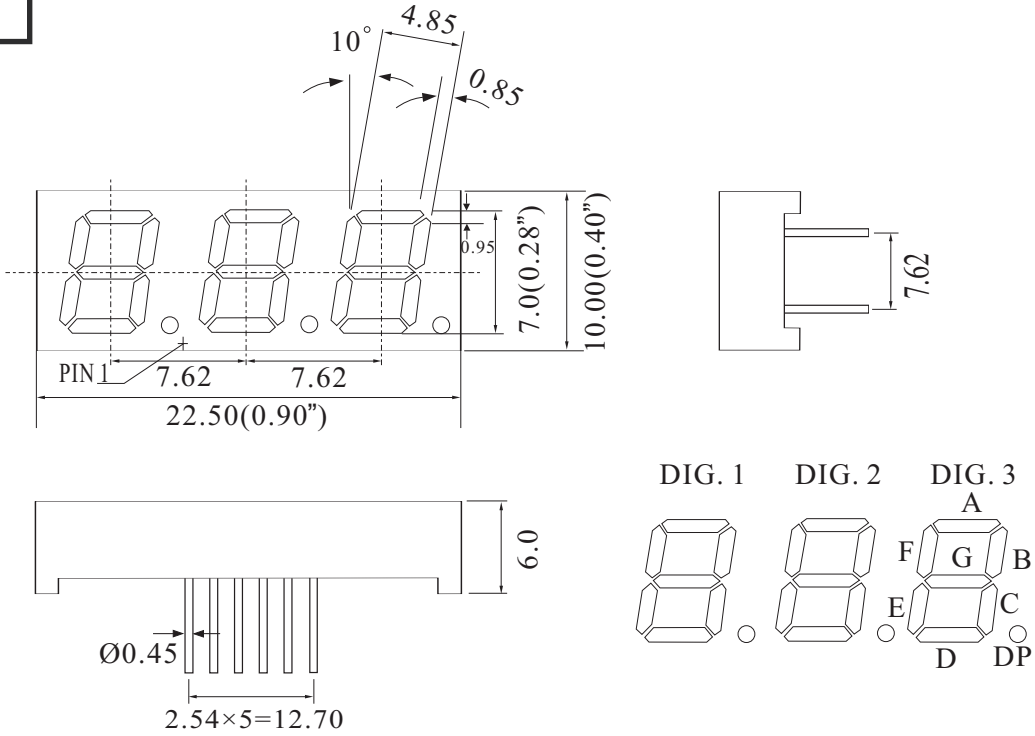




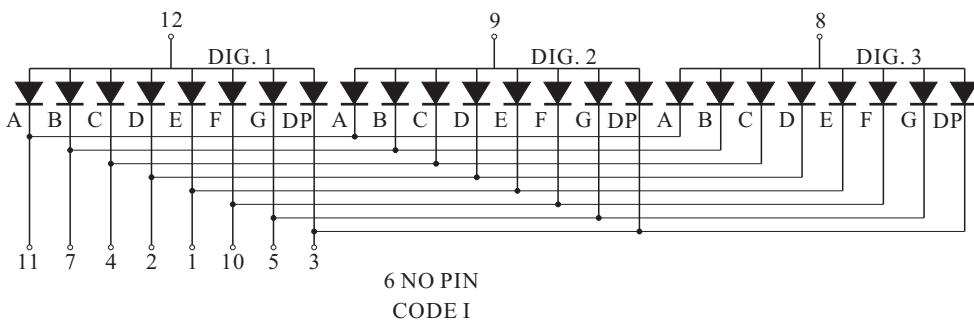
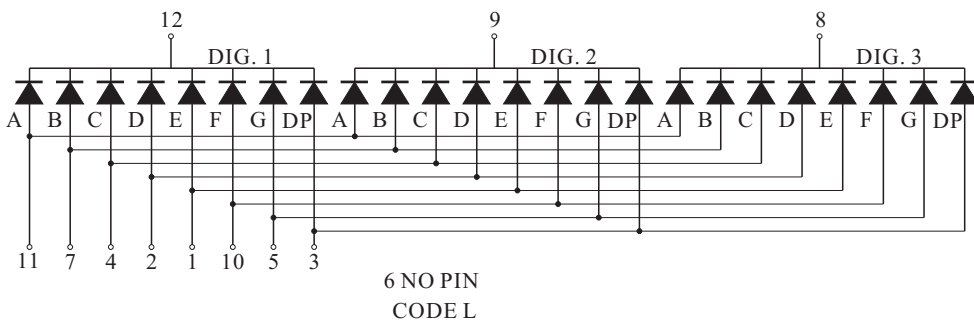
## PACKAGE DIMENSION

E30281



UNIT: MM(INCH) TOLERANCE: ±0.25(0.01")

## INTERNAL CIRCUIT DIAGRAM





# TOYO LED ELECTRONICS LIMITED

Unit 10-11, 19/F, Metro Loft, 38 Kwai Hei Street, Kwai Chung, N.T., Hong Kong.

Tel : (852) 2540 7288

http://www.toyo-led.com

Fax : (852) 2517 1797

E-mail : sales@toyo-led.com



CODE:BL

## CHARACTERS

Chip Material: InGaN Blue LED Chip



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

PARAMETER	SYMBOL	MAXIMUM RATING	UNIT
Power Dissipation	P <sub>D</sub>	90	mW
Peak Forward Current (1/10 Duty Cycle, 0.1 ms Pulse Width)	I <sub>PEAK</sub>	100	mA
DC Forward Current	I <sub>F</sub>	25	mA
Reverse Voltage	V <sub>R</sub>	5	V
Electrostatic discharge	ESD	1000	V
Operating Temperature Range	T <sub>opr</sub> / T <sub>stg</sub>	-40°C to +85°C	
Storage Temperature Range	T <sub>opr</sub> / T <sub>stg</sub>	-40°C to +100°C	

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION (Per Chip)
Forward Voltage	V <sub>F</sub>	-	3.0	3.6	V	I <sub>F</sub> = 20mA
Luminous Intensity	I <sub>v</sub>	60.0	80.0	-	mcd	I <sub>F</sub> = 20mA
Peak Emission Wavelength	λ <sub>p</sub>	-	468	-	nm	I <sub>F</sub> = 20mA
Dominant Emission Wavelength	λ <sub>d</sub>	-	470	-	nm	I <sub>F</sub> = 20mA
Spectral Line Half-Width	Δλ	-	30	-	nm	I <sub>F</sub> = 20mA
Reverse Current	I <sub>R</sub>	-	-	10	uA	V <sub>R</sub> = 5V

#### Note:

- 1 Luminous intensity tolerance is ±15%;
- 2 Dominant Emission Wavelength tolerance is ±1nm.



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## Typical Electro-Optical Characteristic Curve

FIG. 1 Forward Current Vs. Forward Voltage

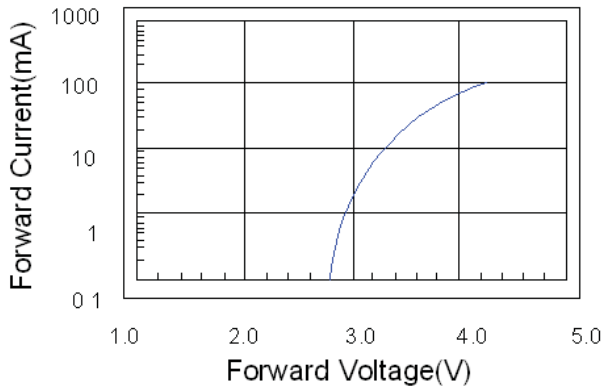


FIG. 2 Relative Intensity Vs. Forward Current

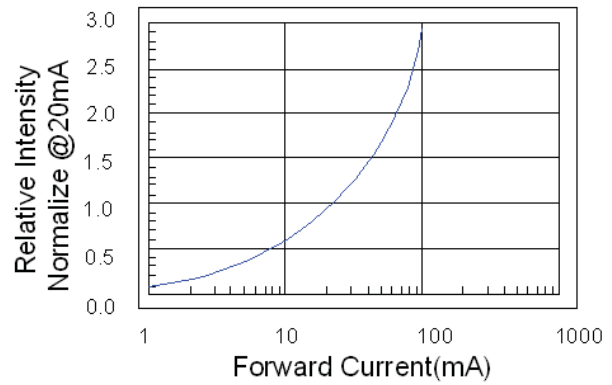


FIG. 3 Forward Voltage Vs. Temperature

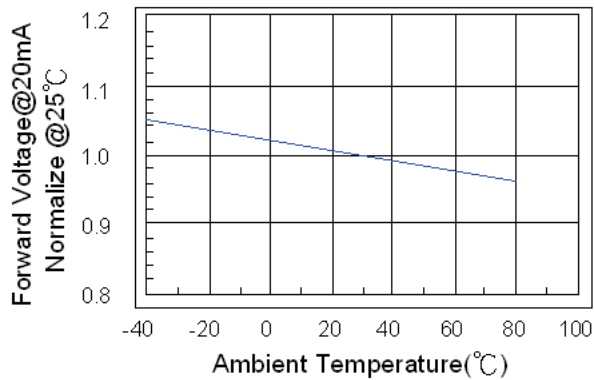


FIG. 4 Relative Intensity Vs. Temperature

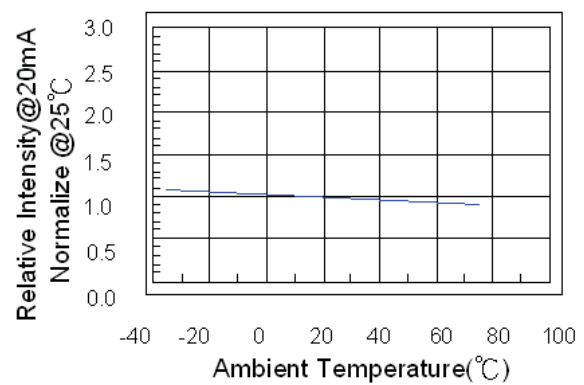
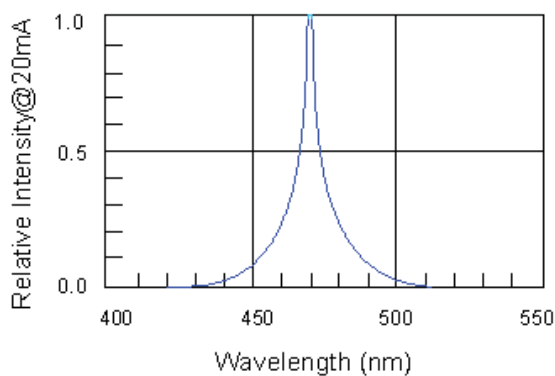


FIG. 5 Relative Intensity Vs. Wavelength

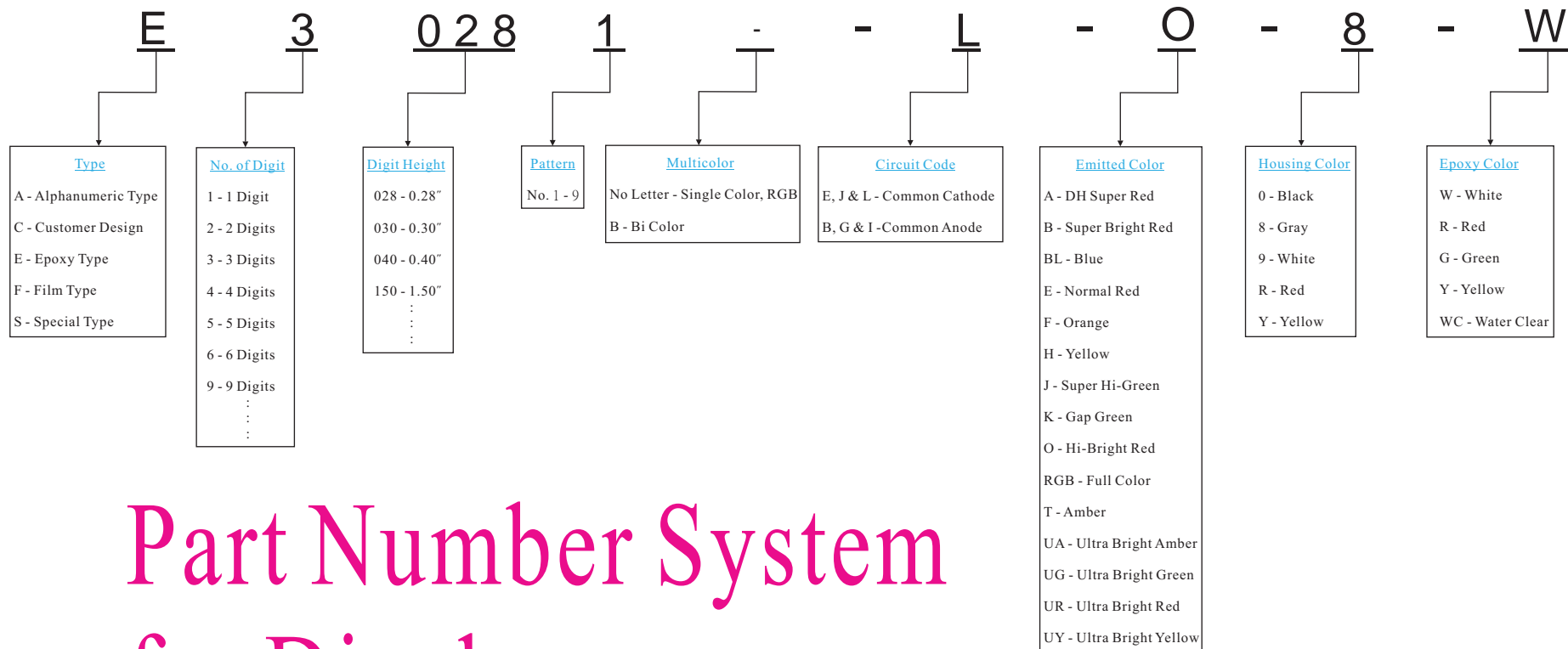




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<http://www.toyo-led.com>

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



## Part Number System for Displays