WCN Opto Group Co., Limited

Company Name	/
Date	2026-1-27
Part No.	WCN731MT-C
Product Group Description	LED Display
Customer Part No.	
Approval Date	

Customer Confirmation	Approved by	Checked by	Prepared By
	William 2026-1-27	Athena 2026-1-27	Liu 2026-1-27

Country of Origin: China

WCN Opto Group Co., Limited

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DISPLAY SPECIFICATION

PART : WCN731MT-C

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REVISION RECORD

MARKER	Matter for revision / Reason for revision	SHEET	DTAE	MAKER	APPOVED SIGN	
A0	P# WCN731MT-C / New Version issued	WHOLE SHEET	2026-1-27	Liu	Athena	William

1. Type No./Manufacture`s Name

WCN731MT-C WCN Opto Group Co., Limited.

2．Outer Dimension :Ø92*10.6mm

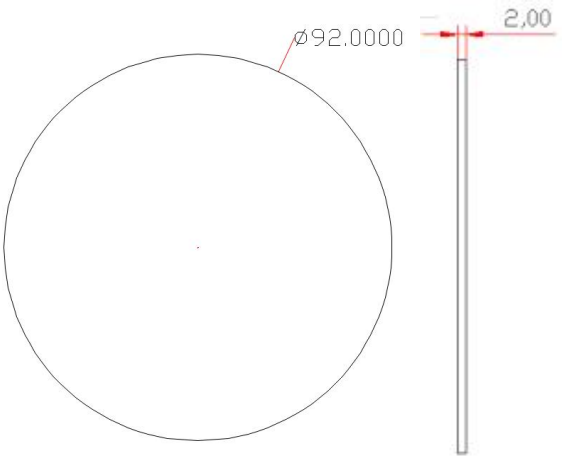
3. Material and Finish of Lead Terminals:

APPEARANCE			CHIP TECHNOLOGY	AlGaInP/InGaN
FACE	SEGMENT	PIN	SOURCE COLOR	Red / White
			DRIVER MODE	Com. Cathode
Black	Black	Connector	PACKING	

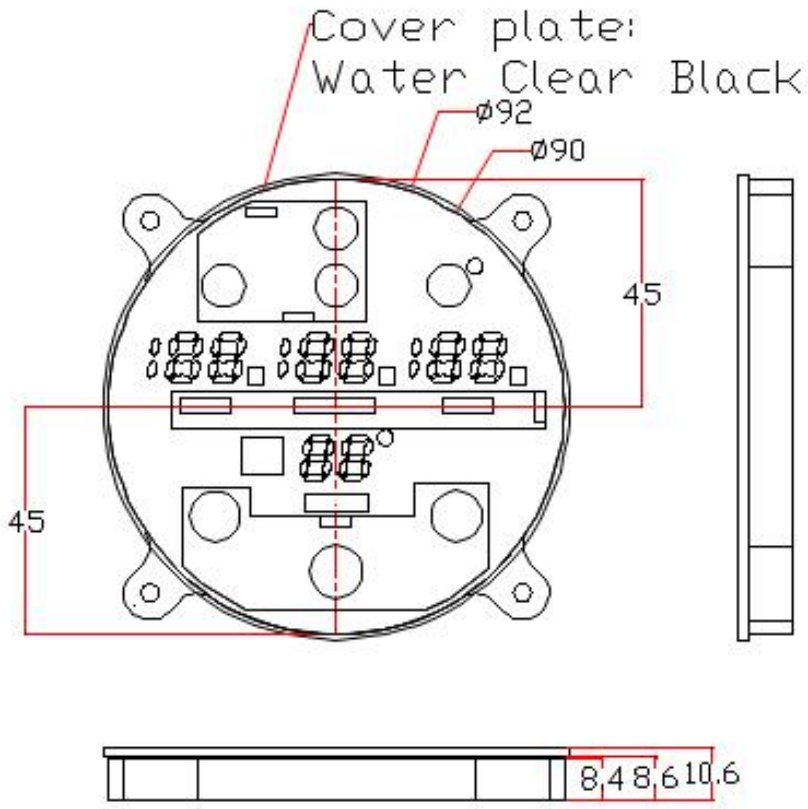
4、 Display Overlay:（90*90mm,tolerance is ±0.25mm）

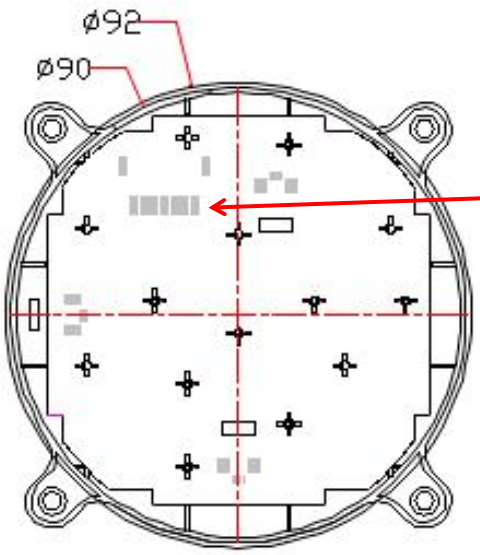


5、 PMMA Cover thickness is 2mm，Water Clear Black.（Tolerance is ±0.2mm）:



■ **Outer Dimension:**

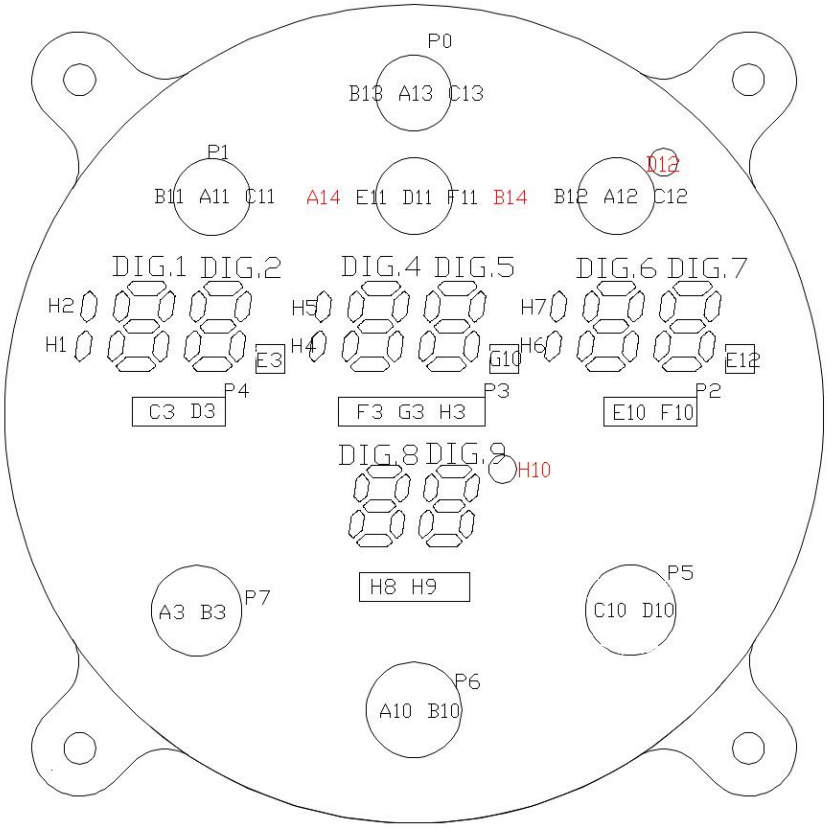


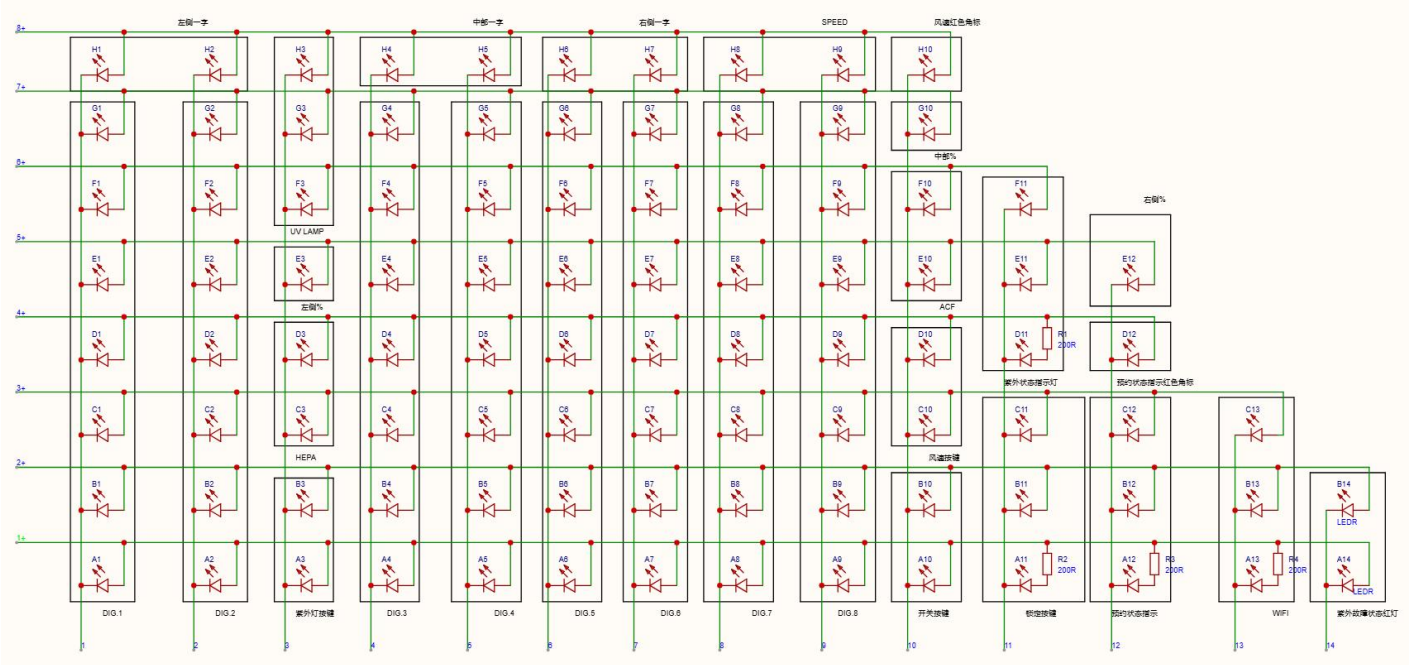


CN1:
VCC
DIN
CLK
3.3V
GND
ADC
NC

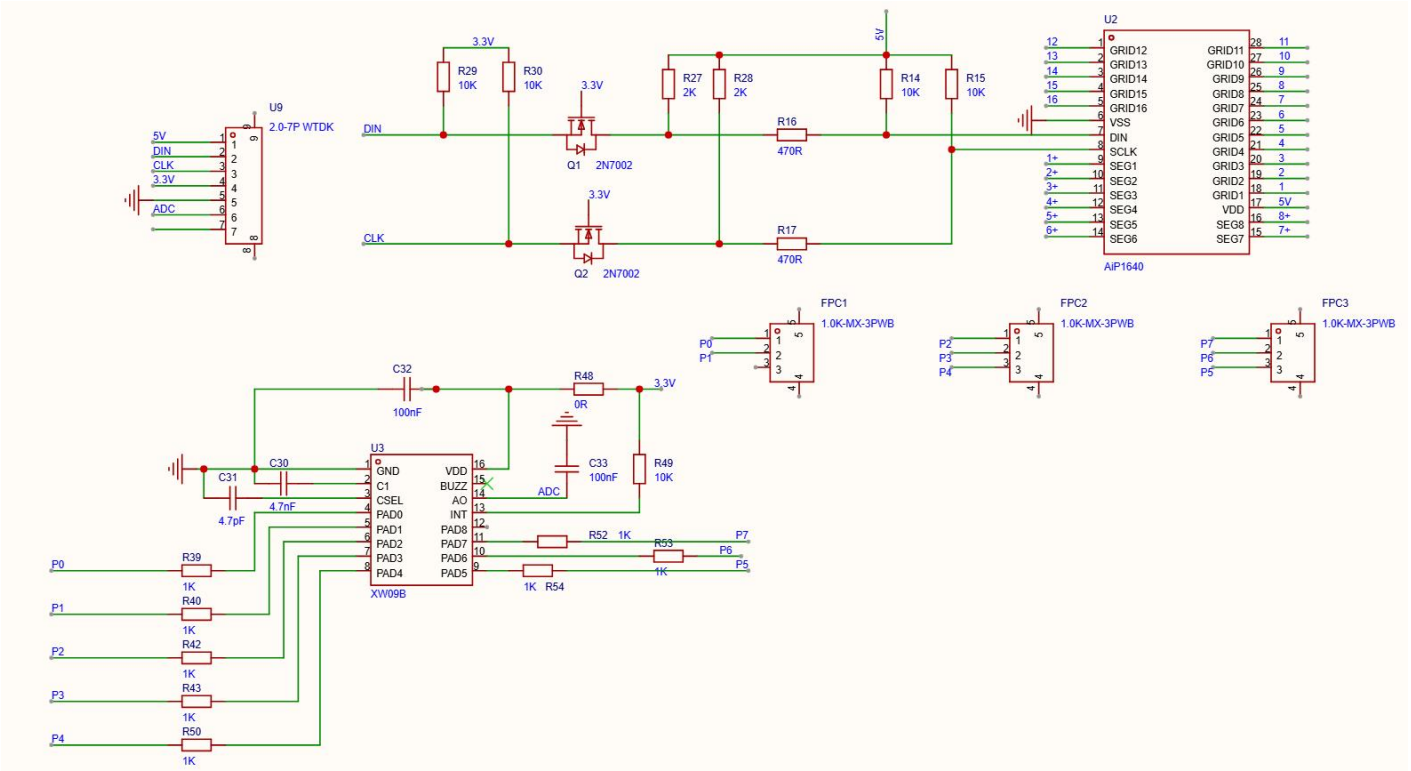
Notes: Unless otherwise stated, the tolerance is ±0.25mm.

■ Circuit Diagram





■ Circuit Diagram



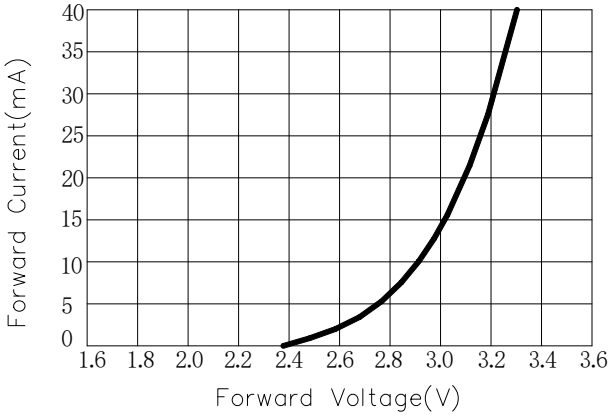
■ ABSOLUTE MAXIMUM RATINGS AT TA=25℃

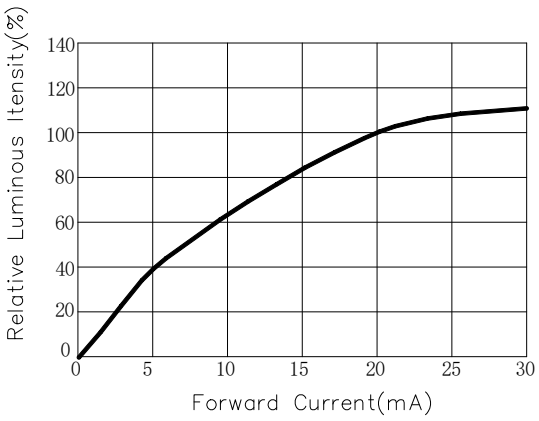
Parameter	Symbol	Condition	Color	Rating	Units
Power Dissipation Per Segment	P_d	—	White	90	mW
			Red	65	
Forward Current Per Segment	I_F	—	White /Red	25	mA
Peak Forward Current Per Segment (1/10 Duty Cycle,0.1ms Pulse Width)	I_{FP}	1/10 Duty 10KHz	White /Red	100	mA
Reverse Voltage Per Segment	V_R	—	White /Red	5	V
Operating Temperature Range	Topr	—	—	-35~+85	℃
Storage Temperature Range	Tstg	—	—	-35~+85	℃

■ Electrical/Optical Characteristics Rating(Ta=25℃) / Per LED

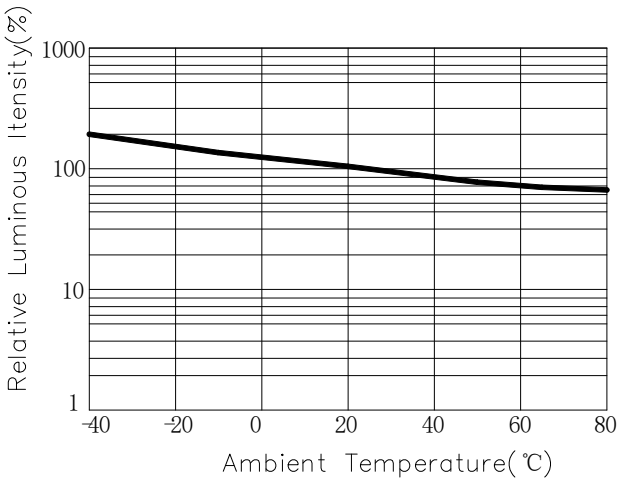
Item	Symbol	Test conditions	Color	Rating			Units
				Min.	Typ.	Max.	
Forward Voltage	V_F	I_F=20mA	White	2.60	3.20	3.60	V
			Red	1.60	2.00	2.60	
Reverse Current	I_R	V_R=5V	All Color	—	—	100	μA
Luminous Intensity	I_V	I_F=20mA	White	600	—	1400	mcd
			Red	100	—	180	
CIE Coordinate	X	I_F=20mA	White	—	0.28	—	—
	Y			—	0.28	—	
Wave Length	λ_D	I_F=20mA	Red	620	—	625	nm
Luminous Intensity Matching Ratio (Segment to Segment)	I_{v-m}	I_F=20mA				1.2:1	

■ Typical Elector-Optical Characteristics Curve of White LED:

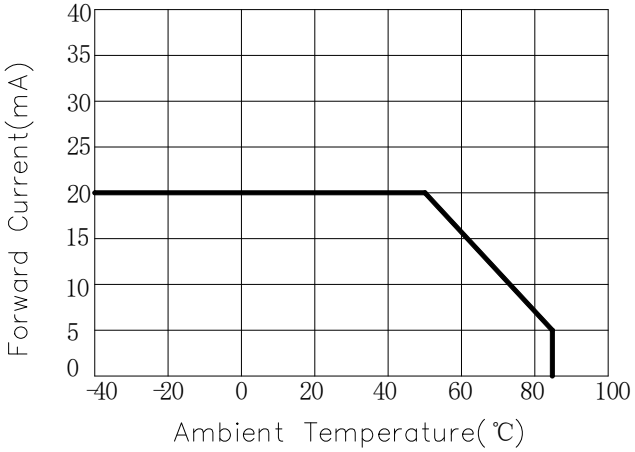




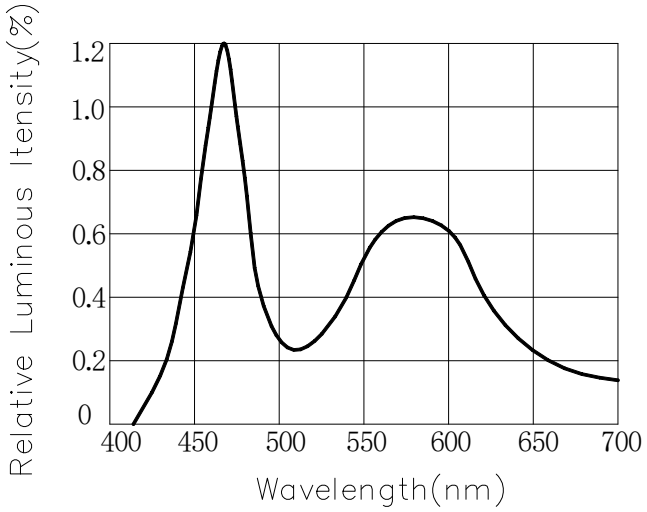
Relative Flux VS Ambient Temperature



Forward Current VS Ambient Temperature



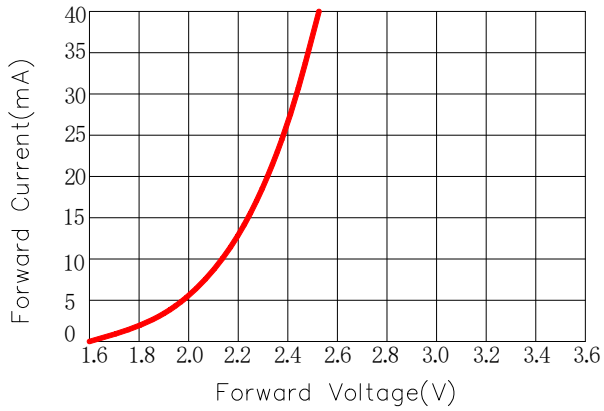
Relative Spectral Distribution



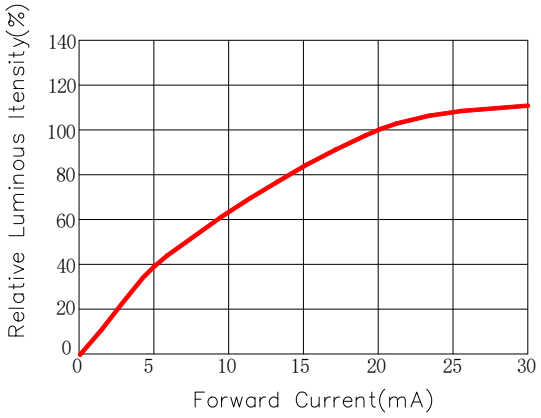
Typical Spectral Distribution

■ Typical Elector-Optical Characteristics Curve of Red LED:

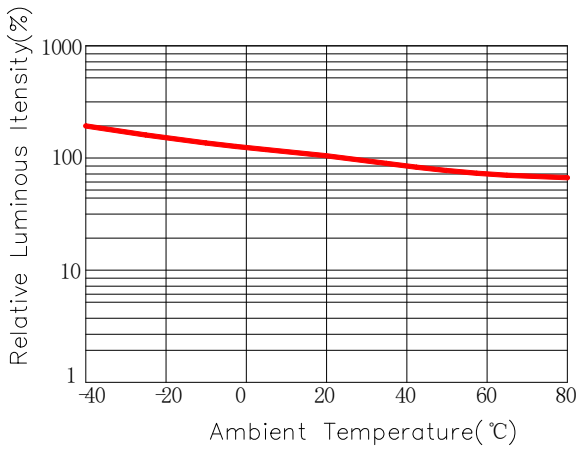
Forward Current VS Forward Voltage



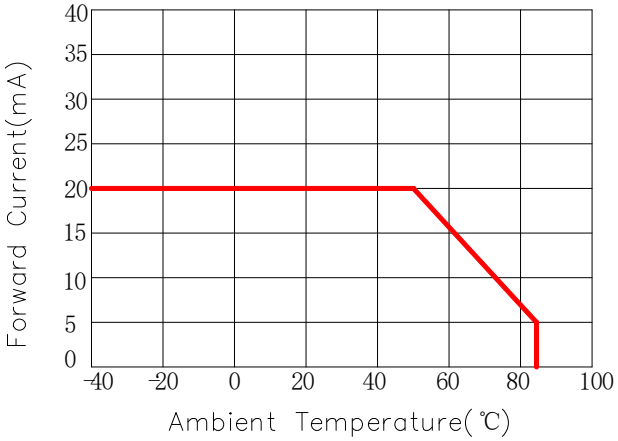
Relative Flux VS Forward Current



Relative Flux VS Ambient Temperature



Forward Current VS Ambient Temperature



Relative Spectral Distribution

