

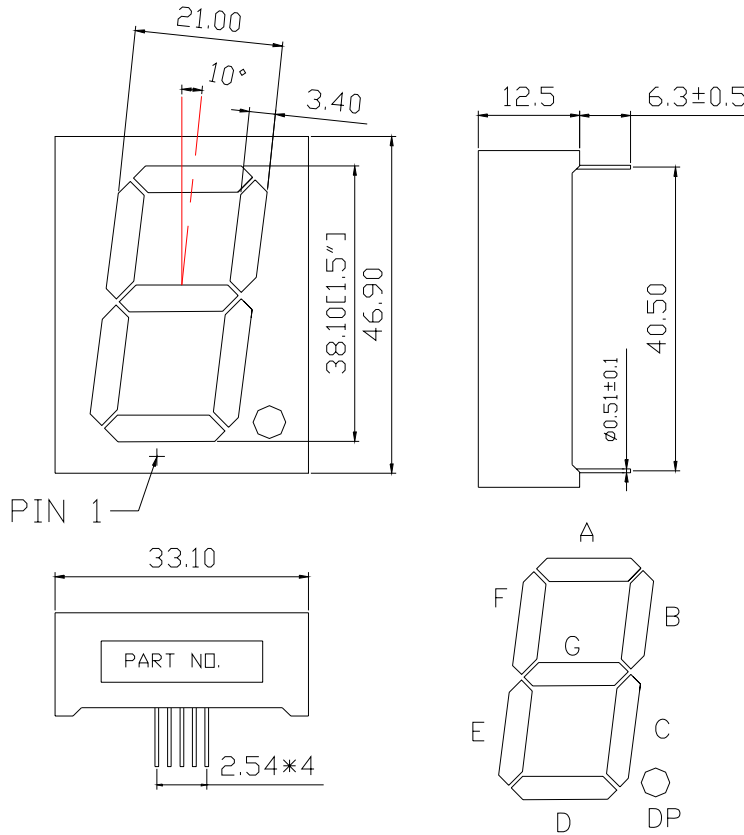
WCN1-00A5WW-A41

SPECIFICATION

WCN			CUSTOMER Confirmed
Prepared by	Checked by	Approved by	
Zhang 2018-8-14	Athena		
REVISION RECORD			

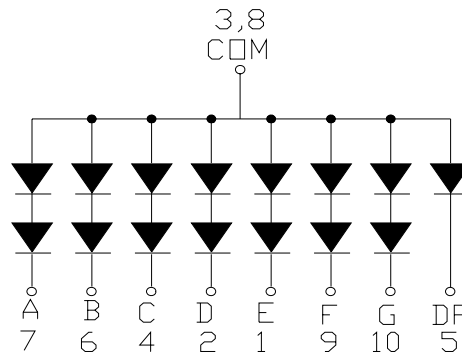
**REVISION: A0**

Outer Dimension:



Note: Unless otherwise stated, The tolerance is ± 0.25 mm.

Circuit Diagram:



Pin Connection:

PIN NO.	CONNECTION	PIN NO.	CONNECTION
1	Cathode E	6	Cathode B
2	Cathode D	7	Cathode A
3	Common Anode	8	Common Anode
4	Cathode C	9	Cathode F
5	Cathode DP	10	Cathode G

■ **Features:**

- High Reliability
- Color: White
- Low Power Requirement
- Easy Assembly

■ **Description:**

- Single Digit Display
- Digit Height:38.1mm(1.5")
- Black Face and Milky Segment

■ **Absolute Maximum Rating (Ta=25°C):**

Parameter	Symbol	Condition	Color	Rating	Units
Power Dissipation Segment	P _d	—	White	180/90	mW
Forward Current Segment	I _F	—	White	25	mA
Peak Forward Current Per Segment	I _{FP}	1/10 Duty 10KHz	White	100	mA
Reverse Voltage Per Segment	V _R	—	White	10/5	V
Operating Temperature Range	T _{opr}	—		-35~+85	°C
Storage Temperature Range	T _{stg}	—		-35~+85	°C

■ **Electrical/Optical Characteristics Rating(Ta=25°C)**

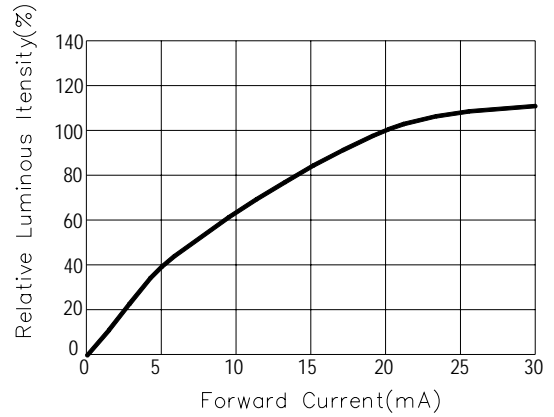
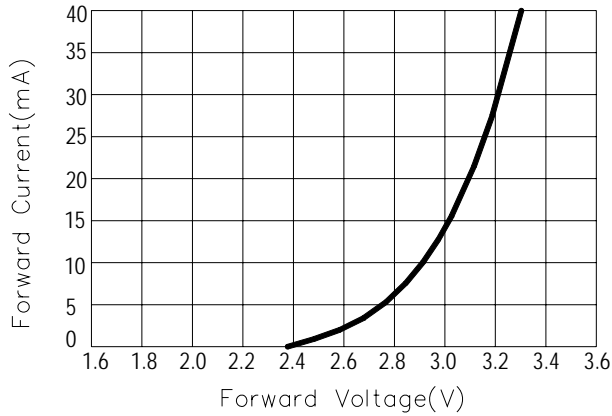
Item	Symbol	Test conditions	Location	Rating			Units
				Min.	Typ.	Max.	
Forward Voltage	V _F	I _F =20mA	Per Segment	5.2/2.6	6.4/3.2	7.2/3.6	V
Reverse Current	I _R	V _R =10V	Per Segment	—	—	100	μA
Luminous Intensity	I _V	I _F =20mA	Per Dice	600	—	1100	mcd
CIE Coordinate	X	I _F =20mA	Per Dice	—	0.26	—	
	Y			—	0.25	—	
Luminous Intensity Matching Ratio	I _{V-m}	I _F =20mA				1.2:1	

■ **Luminous Intensity Sorting: (Luminous Intensity Tolerance is +/-10%)**

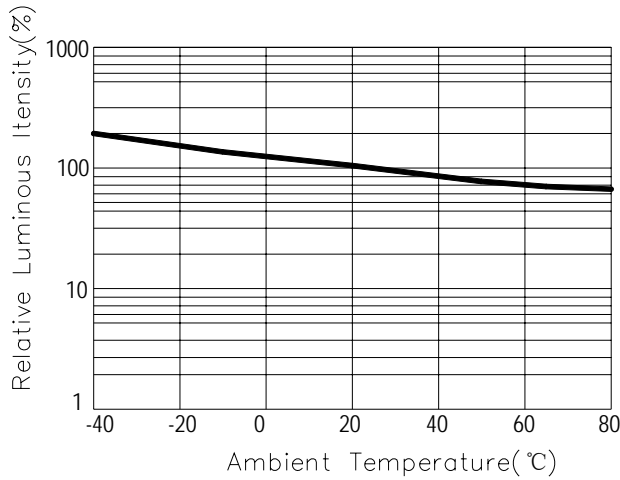
Rank	Min	Max	Unit	Rank	Min	Max	Unit
E	600	800	mcd	F	800	1100	mcd

■ **Soldering Conditions: Soldering Temp. ≤+260°C, Soldering Time. ≤3sec.
(at 2mm Distance from The Case of Reflector Edge)**

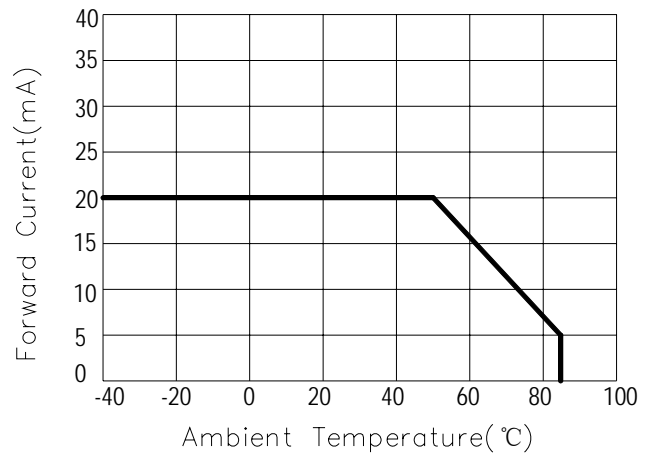
■ **Typical Elector-Optical Characteristics Curve:**



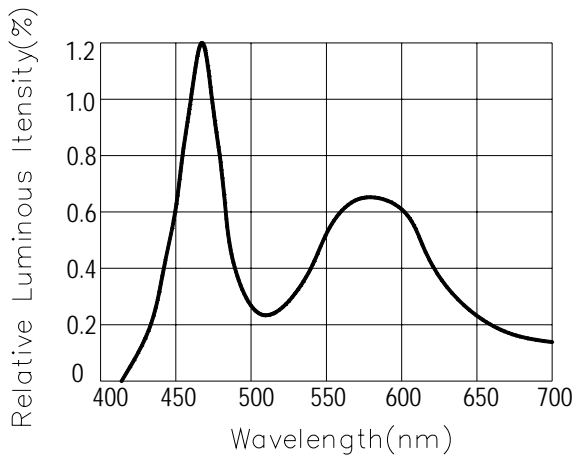
Relative Flux VS Ambient Temperature



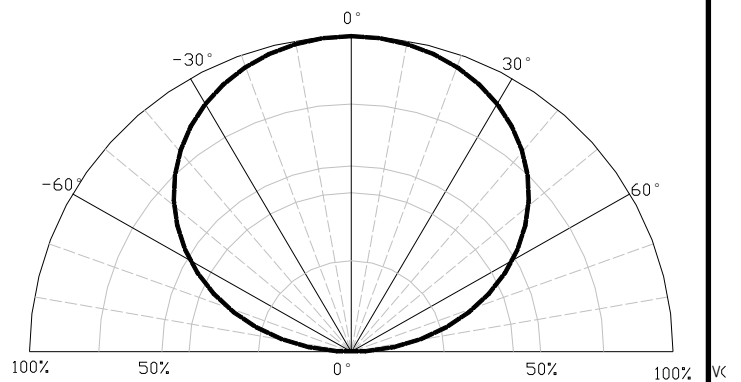
Forward Current VS Ambient Temperature



Relative Spectral Distribution



Typical Spectral Distribution





WCN Opto Group Co., Limited

LED Displays Reliability Test:

CLASSIFICATION	TEST ITEM	DESCRIPTION AND TEST CONDITION
ENDURANCE TEST	OPERATION LIFE	EVALUATES RESISTANCE OF THE DEVICE WHEN OPERATED AT ELECTRICAL STRESS T _a = UNDER ROOM TEMPERATURE I _F = I _F max
	HIGH TEMPERATURE HIGH HUMIDITY STORAGE	EVALUATES MOISTURE RESISTANCE OF THE DEVICE WHEN STORED FOR A LONG TERM AT HIGH TEMPERATURE AND HUMIDITY T _a = 65±5°C RH=90~95%RH TEST TIME=240± 2Hrs
	HIGH TEMPERATURE STORAGE	EVALUATES DEVICE DURABILITY FOR LONG TERM STORAGE IN HIGH TEMPERATURE T _a = 85±5°C(COB: T _a =65±5°C) TEST TIME=1000Hrs(-24Hrs, +72Hrs)
	LOW TEMPERATURE STORAGE	EVALUATES DEVICE DURABILITY FOR LONG TERM STORAGE IN LOW TEMPERATURE T _a = -35±5°C TEST TIME=1000Hrs(-24Hrs, +72Hrs)
ENVIRONMENTAL TEST	TEMPERATURE CYCLING	EVALUATES RESISTANCE OF DEVICE AT THERMAL STRESSES OR EXPANSION AND CONTRACTION 85°C ~ 25°C ~ -35°C ~ 25°C 30min 5min 30min 5min 10 CYCLES(COB: T _{hot} =65°C, T _{cold} =-25°C)
	THERMAL SHOCK	EVALUATES DEVICE STRUCTURE AND STRUCTURE AND MECHANICAL RESISTANCE WHEN SUDDENLY EXPOSED AT SERVE CHANGES 85±5°C ~ -35±5°C 10min 10min 10 CYCLES(COB: T _{hot} =65°C, T _{cold} =-25°C)
	SOLDERABILITY	EVALUATES SOLDERABILITY ON LEADS OF DEVICE T.SOL=230±5°C DWELL TIME=5±1sec.
	SOLDER RESISTANCE	EVALUATES RESISTANCE TO THERMAL STRESS CAUSED BY SOLDERING T.SOL=260±5°C DWELL TIME=10±1sec.

Packing method A:

30 pcs / Red Expandable Polyethylene.

150 pcs / Box(360*175*130mm).

900 pcs / Carton(550*380*280mm).