

WCN1-0428WW-A11

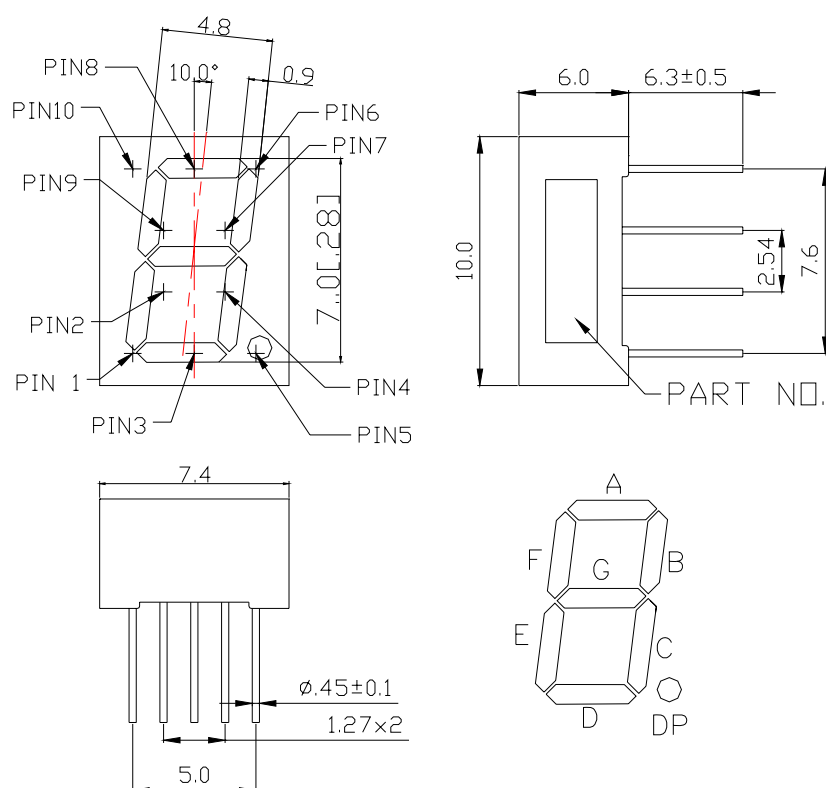
SPECIFICATION

WCN			CUSTOMER Confirmed
Prepared by	Checked by	Approved by	
Fei 2016-6-13	Athena	William	
REVISION RECORD			
A1:Change Seal location(2016-6-13)			



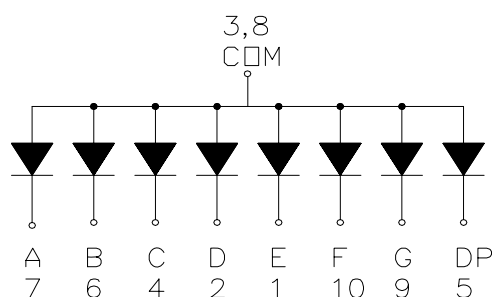
REVISION: A1

Outer Dimension:



Notes: Unless otherwise stated, The tolerance is $\pm 0.25\text{mm}$.

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 G
5	Cathode DP	10	Cathode F

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■ Features:

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

■ Description:

- Single Digit Display
- Digit Height:7.0mm(0.28")
- Black Face and Yellow Segment

■ Absolute Maximum Rating (Ta=25℃):

Parameter	Symbol	Condition	Color	Rating	Units
Power Dissipation Per Segment	P _d	—	White	90	mW
Forward Current Per 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	5	V
Operating Temperature Range	Topr	—	—	-40~+110	℃
Storage Temperature Range	Tstg	—	—	-40~+110	℃

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

Item	Symbol	Test conditions	Location	Rating			Units
				Min.	Typ.	Max.	
Forward Voltage	V _F	I _F =20mA	Per Segment	—	3.4	4.0	V
Reverse Current	I _R	V _R =5V	Per Segment	—	—	100	μ A
Luminous Intensity	I _V	I _F =10mA	Per Segment	1751	3500	6100	μ cd
CIE Coordinate	X	I _F =20mA	Per Segment	—	0.240	—	nm
	Y				0.230		
Spectral Line Half Width	△ λ	I _F =20mA	Per Segment	—	20	—	nm
Luminous Intensity Matching Ratio (Segment to Segment)	I _{v-m}	I _F =10mA	—	—	—	1.2:1	

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

Rank	Symbol	Condition	Min	Max	Unit
I	I	I _F =10mA	1751	2350	μcd
J	J	I _F =10mA	2351	3050	μcd
K	K	I _F =10mA	3051	4000	μcd
L	L	I _F =10mA	4001	5000	μcd
M	M	I _F =10mA	5001	6100	μcd

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

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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:

640 pcs / Red Expandable Polyethylene.

3840 pcs / Box(360*175*130mm).

23040 pcs / Carton(550*380*280mm).