

**WCN1-1052SD-A31****SPECIFICATION**

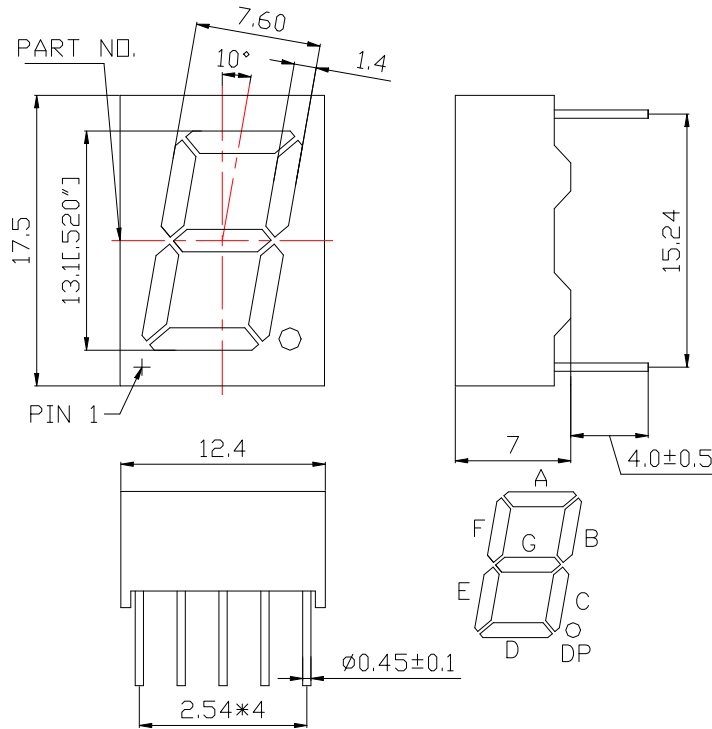
WCN			CUSTOMER Confirmed
Prepared by	Checked by	Approved by	
Liu 2024-2-20	Athena	William	



REVISION: A1

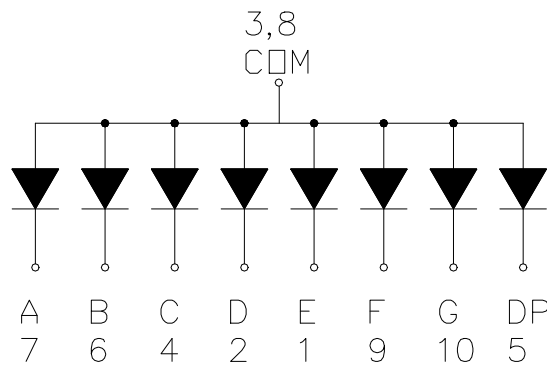
# WCN Opto Group Co., Limited

## Outer dimension:



Notes: Unless otherwise stated, The tolerance is  $\pm 0.25$ 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: Bright Red
- Low Power Requirement
- Easy Assembly

■ Description:

- Single Digit LED Display
- Digit Height: 13.1mm(0.52" )
- Gray Face and Milky Diffused Segment

■ Absolute Maximum Rating (Ta=25°C) / Per Dice:

Parameter	Symbol	Condition	Color	Rating	Units
Power Dissipation	P <sub>d</sub>	—	Red	65	mW
Forward Current	I <sub>F</sub>	—	Red	25	mA
Derating Of If Per	ΔI <sub>F</sub>	Ta ≥ 25°C	Red	0.30	mA/°C
Peak Forward Current	I <sub>FM</sub>	1/10 Duty 10KHz	Red	100	mA
Reverse Voltage	V <sub>R</sub>	—	Red	5	V
Operating Temperature Range	Topr	—	—	-35~+85	°C
Storage Temperature Range	Tstg	—	—	-35~+85	°C

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

Item	Symbol	Test conditions	Location	Rating			Units
				Min.	Typ.	Max.	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	Per Dice	—	2.00	2.60	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	Per Dice	—	—	100	μA
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> =10mA	Per Dice	8501	14000	—	μcd
Wave Length	λ <sub>p</sub>	I <sub>F</sub> =20mA	Per Dice	—	660	—	nm
	λ <sub>b</sub>				640		
Spectral Line Half Width	Δλ	I <sub>F</sub> =20mA	Per Dice	—	20	—	nm
Luminous Intensity Matching Ratio	I <sub>v-m</sub>	I <sub>F</sub> =10mA				2:1	

■ Luminous Intensity Sorting: (Luminous intensity tolerance: +/-10%)

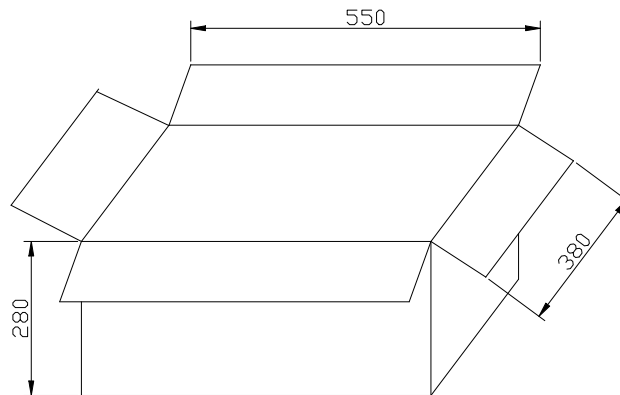
Rank	Symbol	Condition	Min	Max	Unit
P	P	I <sub>F</sub> =10mA	8501	10500	μcd
Q	Q	I <sub>F</sub> =10mA	10501	12800	μcd
R	R	I <sub>F</sub> =10mA	12801	15250	μcd
S	S	I <sub>F</sub> =10mA	15251	18000	μcd
T	T	I <sub>F</sub> =10mA	18001	21500	μcd

■ Hue Grade: I<sub>F</sub> =10mA (Hue: +/-1nm)

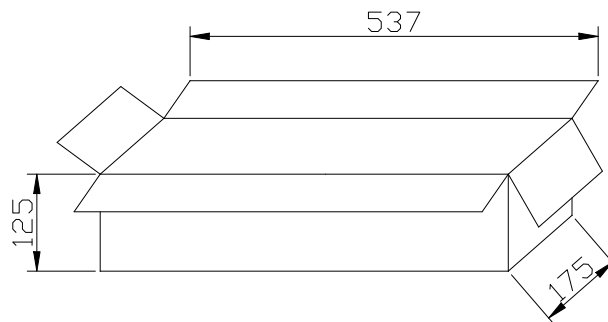
Rank	Symbol	Hue Range	Units
69	69	636.1-639.0	nm
70	70	639.1-642.0	nm

■ Soldering Conditions: Soldering Temp. ≤+260°C Soldering Time. ≤3sec.

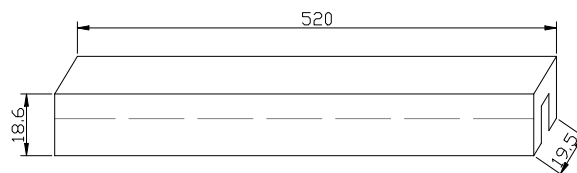
(at 2mm Distance from The Case of Reflector Ed

**■ Outer Carton Dimension:**

- Note:**
1. An Outer carton contained 4 Inner cartons and 8640 PCS products.
  2. Unless otherwise stated, the tolerance is +5mm / -0mm.
  3. The carton material is A=A Brown Paper.

**■ Inner Carton Dimension:**

- Note:**
1. An Inner carton contained 54 PCS IC Tube and 2160 PCS products.
  2. Unless otherwise stated, the tolerance is  $\pm 2$  mm.
  3. The carton outside and inside paper material are A rank Paper.

**■ IC Tube Dimension:**

- Note:**
1. An IC Tube contained 40 PCS products.
  2. Unless otherwise stated, the tolerance is  $\pm 0.5$  mm.
  3. The IC Tube material is Water clear PVC.