



WCN Opto Group Co., Limited

Customer Name:

Date:

2018-10-11

Part No:

WCN2S-1030SR-C3

Product Group
Description:

LED Display

Customer Part No:

Approval Date:

Customer
Confirmation

Approved by

Checked by

Athena
2018-10-11

Prepared By

Zhang
2018-10-11

Country of Origin: China

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RoHS



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REVISION RECORD

MARKER	Matter for revision	SHEET	DTAE	MAKER	APPOVED SIGN	
	Reason for revision					
A0	P# WCN2S-1030SR-C3	Whole Spec	2017-11-4	Fei	Athena	
	New Version issued					
A1	Delete Overlay	Page.4/5	2018-5-19	Zhang	Athena	
	Customer demand					
A2	Change Outer Dimension	Page.5	2018-5-23	Zhang	Athena	
	Customer demand					
A3	Change Outer Dimension	Page.5	2018-6-29	Zhang	Athena	
	Customer demand					
A4	Change Packing Data	Page.8	2018-10-11	Zhang	Athena	
	Revise					



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1. Type No./Manufacture's Name

WCN2S-1030SR-C3 / WCN Opto Group Co., Limited

2. Features:

- . High Reliability
- . Low Power Requirement
- . Easy Assembly

3. Faction: Display Digit Characteristic

4. Soldering Conditions: Soldering Temp. 260 ± 5 °C, Soldering Time. 3~5 sec.

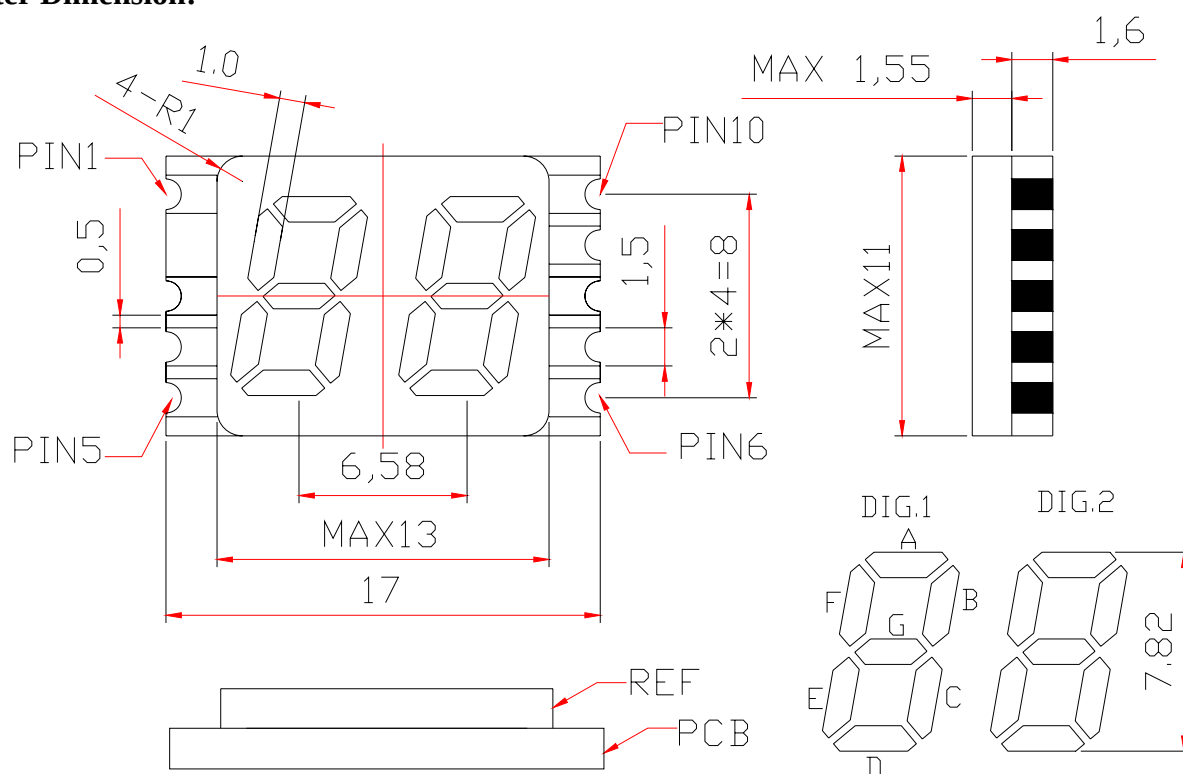
Soldering Power <30 W.

5. Description:

- . Two Digit LED Display
- . Digit Height: 7.62mm(0.30")
- . Gray Face and Milky Segment
- . Color: Red

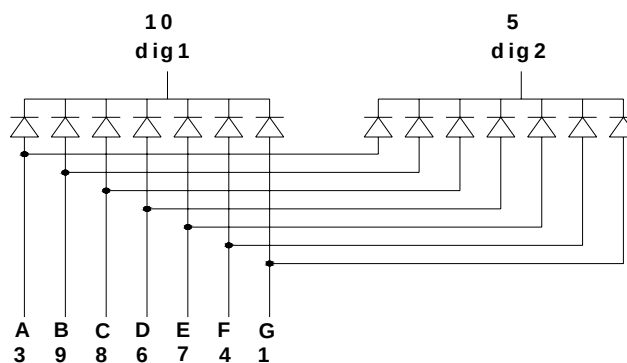
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Outer Dimension:



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

■ **Circuit Diagram:**



■ Pin Connection:

PIN NO.	CONNECTION	PIN NO.	CONNECTION
1	Aonde G	6	Aonde D
2	NO PIN	7	Aonde E
3	Aonde A	8	Aonde C
4	Aonde F	9	Aonde B
5	Common Cathode dig2	10	Common Cathode dig1

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ABSOLUTE MAXIMUM RATINGS AT TA=25°C

Parameter	Symbol	Condition	Color	Rating	Units
Power Dissipation Per Segment	P _d	—	Red	65	mW
Forward Current Per Segment	I _F	—	Red	25	mA
Peak Forward Current Per Segment	I _{FP}	1/10 Duty 1KHz	Red	100	mA
Reverse Voltage Per Segment	V _R	—	Red	5	V
Operating Temperature Range	T _{opr}	—	—	-40~+85	°C
Storage Temperature Range	T _{stg}	—	—	-40~+85	°C

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

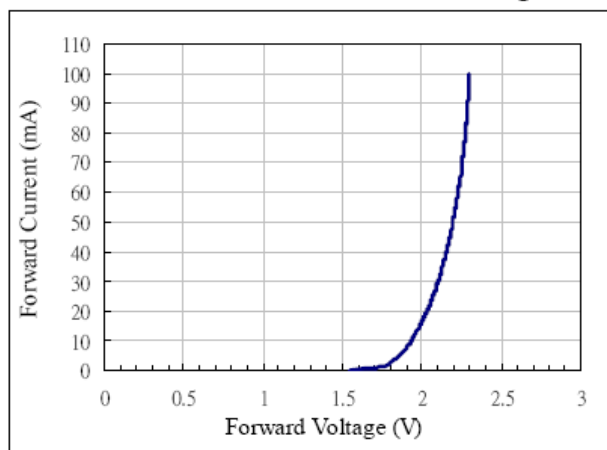
Item	Symbol	Test conditions	Location	Rating			Units
				Min.	Typ.	Max.	
Forward Voltage	V _F	I _F =20mA	Per Chip	1.80	2.00	2.60	V
Reverse Current	I _R	V _R =5V	Per Chip	—	—	100	μA
Luminous Intensity	I _V	I _F =10mA	Per Chip	4001	6500	10500	ucd
Wave Length	λ _P	I _F =20mA	Per Chip	—	640	—	nm
	λ _D			627	630	633	
Spectral Line Half Width	△λ	I _F =20mA	Per Chip	—	—	20	nm
Luminous Intensity Matching Ratio (Segment To Segment)	I _{v-m}	I _F =10mA				1.2:1	

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

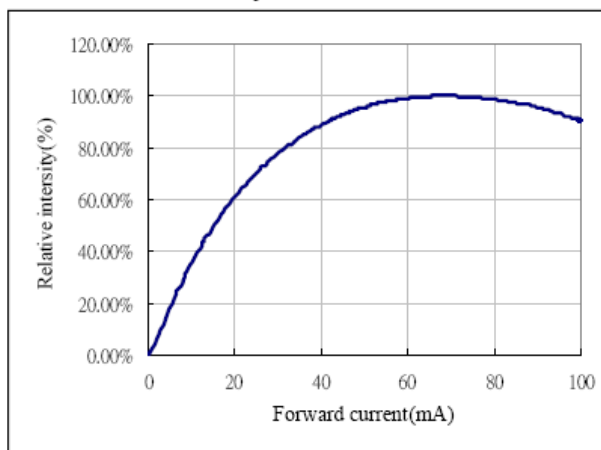
Rank	Symbol	Condition	Min	Max	Unit
L	L	I _F =10mA	4001	5000	μcd
M	M	I _F =10mA	5001	6100	μcd
N	N	I _F =10mA	6101	7200	μcd
O	O	I _F =10mA	7201	8500	μcd
P	P	I _F =10mA	8501	10500	μcd

■ Typical Optical-Electronic Characteristic Curves

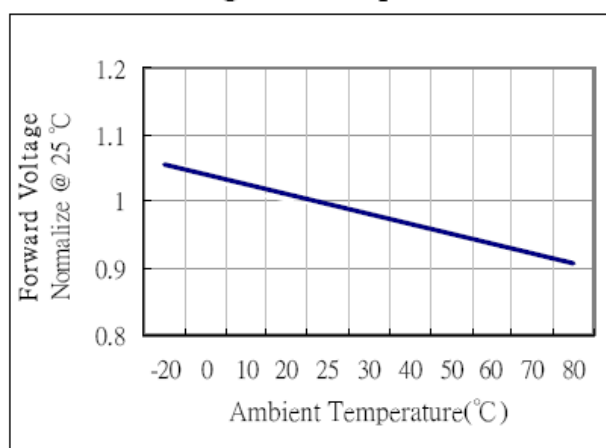
Forward current vs. Forward voltage



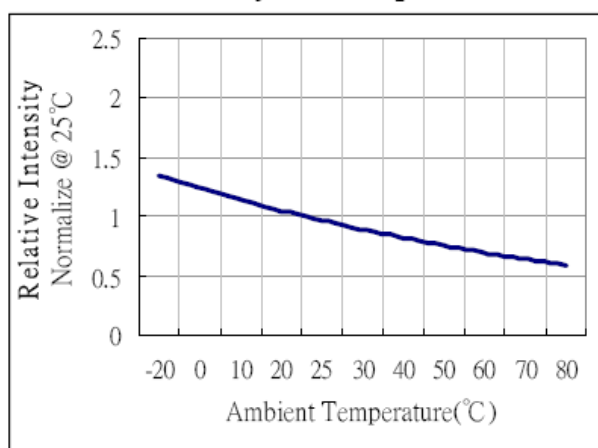
Relative intensity vs. Forward current



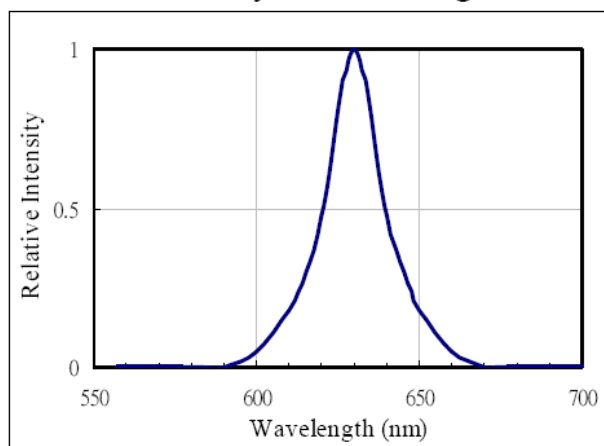
Forward voltage vs. Temperature



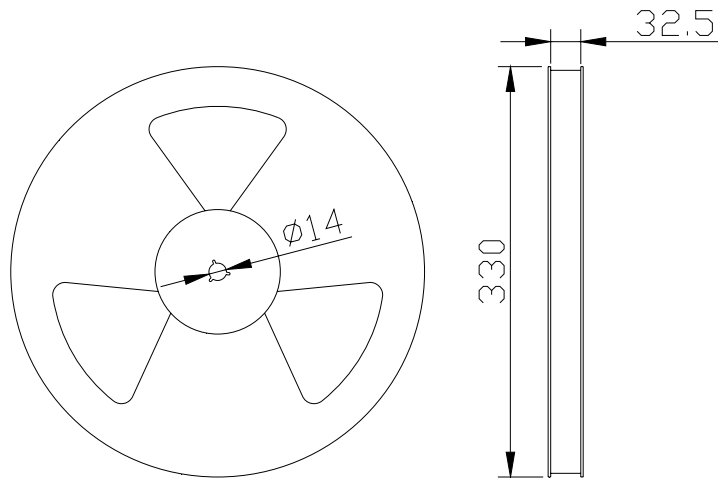
Relative intensity vs. Temperature



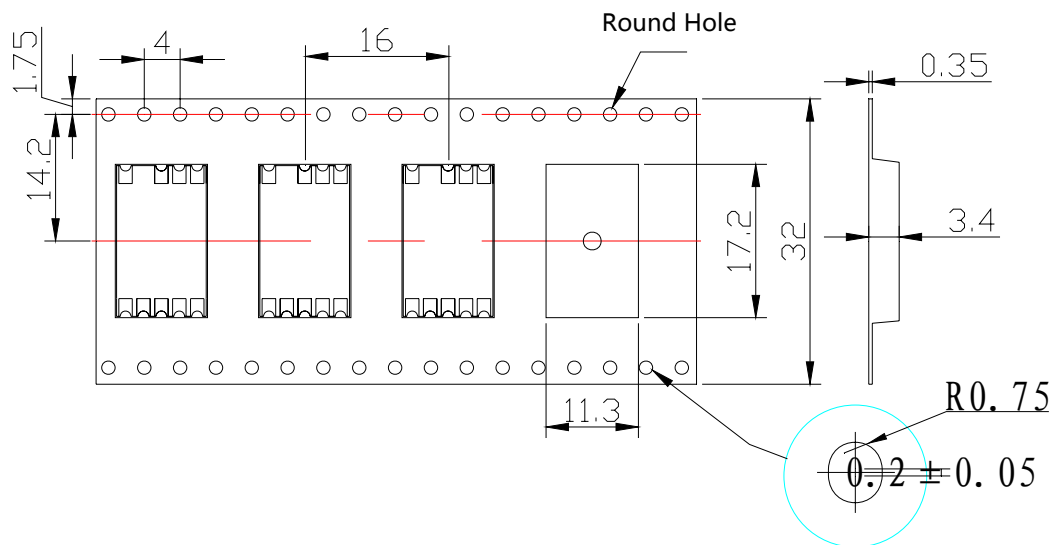
Relative intensity vs. Wavelength



■ **Packing Reel Dimensions(mm):**

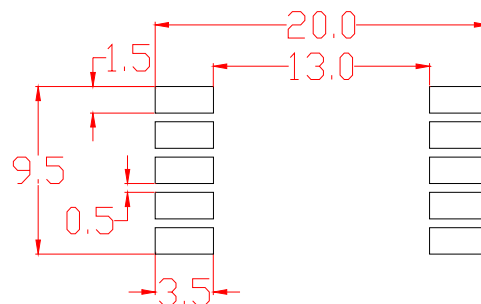


■ **Dimensions of Tape (Unit: mm)**



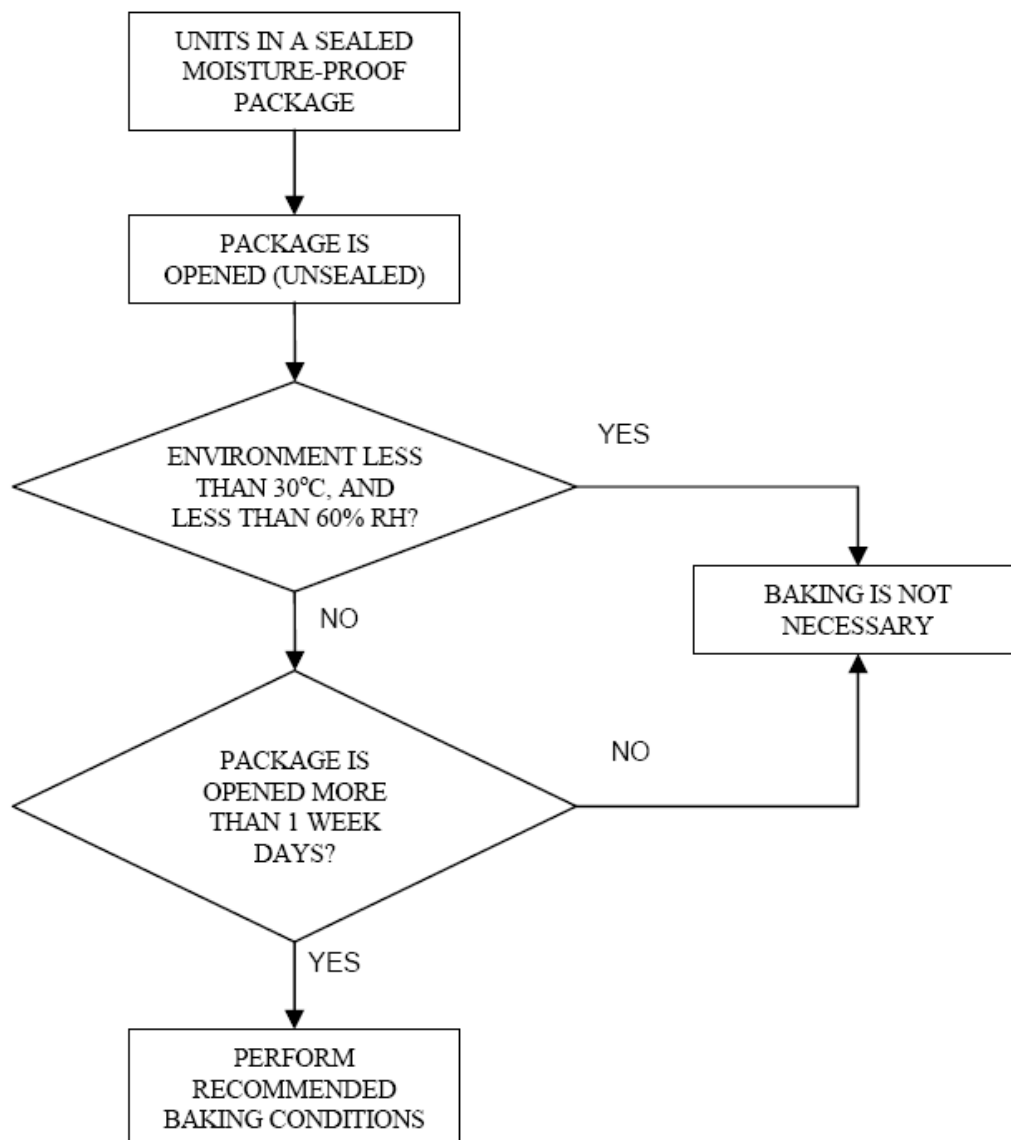
■ **One Reel contained 1100 PCS products:**

■ **Recommended Soldering Pattern:**



■ Moisture Proof Packaging :

All N/D SMD displays are shipped in moisture proof package. The displays should be stored at 30°C or less and 60% RH or less. Once the package opened, moisture absorption begins.



■ Baking Conditions:

If the parts not stored in dry conditions, they must be baked before re-flow to prevent damage to the parts.

Package	Temperature	Time
In Reel	60 °C	≥ 48hours
In Bulk	100 °C	≥ 4hours
	125 °C	≥ 2hours

■ Baking should only be done once.