

WCNLB1708-WW11

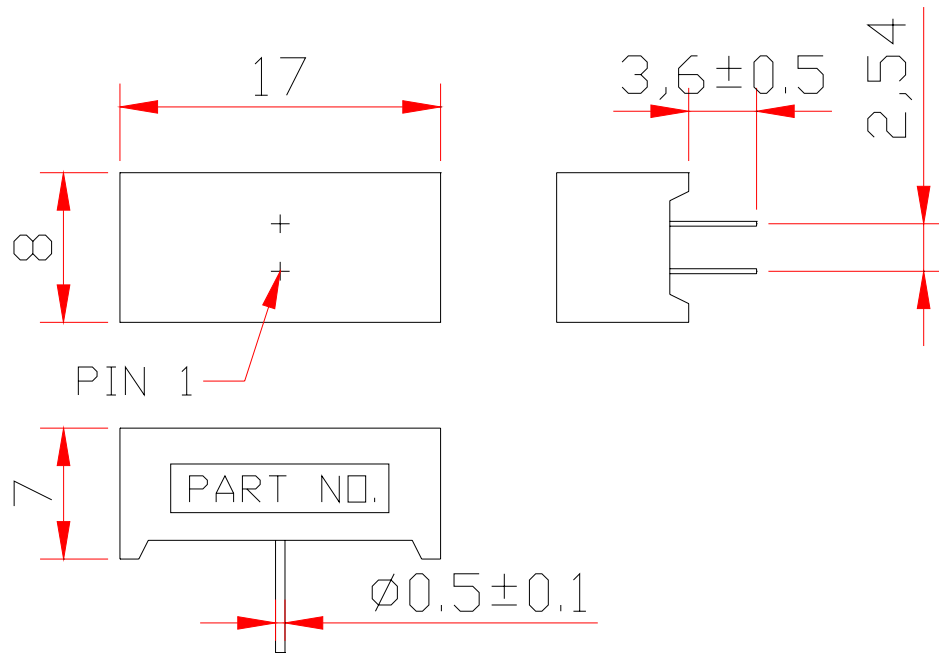
SPECIFICATION

WCN			CUSTOMER Confirmed
Prepared by	Checked by	Approved by	
Fei 2016-04-27	Athena		
REVISION RECORD			
A3: Change PIN Dimension (2016-4-27)			



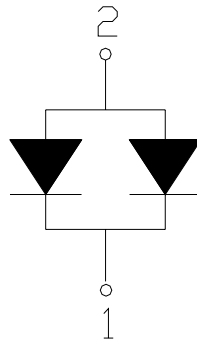
REVISION: A3

■ Outer Dimension:



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

■ Circuit Diagram:



■ Pin Connection:

PIN NO.	CONNECTION	PIN NO.	CONNECTION
1	Cathode	2	Anode

■ Overlay:



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■ Features:

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

■ Description:

- One Window Bar Display
- White Face and Milky die with Black Film

■ Absolute Maximum Rating (Ta=25°C):

Parameter	Symbol	Condition	Color	Rating	Units
Power Dissipation Per Bar	P _d	—	White	90	mW
Forward Current Per Bar	I _F	—	White	25	mA
Peak Forward Current Per Bar	I _{FP}	1/10 Duty 10KHz	White	100	mA
Reverse Voltage Per Bar	V _R	—	White	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 Bar	—	3.0	3.60	V
Reverse Current	I _R	V _R =5V	Per Bar	—	—	100	μA
Luminous Intensity	I _v	I _F =5mA	Per Bar	18001	28500	43000	μcd
Wave Length	X	I _F =5mA	Per Bar	—	0.2295	—	
	Y			—	0.1752	—	
Spectral Line Half Width	△λ	I _F =5mA	Per Bar	—	30	—	nm
Luminous Intensity Matching Ratio (Segment to Segment)	I _{v-m}	I _F =5mA	—	—	—	1.2:1	

■ Soldering Conditions: Soldering Temp. ≤ +260°C, 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 $I_F = I_F \text{ max}$
	HIGH TEMPERATURE HIGH HUMIDITY STORAGE	EVALUATES MOISTURE RESISTANCE OF THE DEVICE WHEN STORED FOR A LONG TERM AT HIGH TEMPERATURE AND HUMIDITY $T_a = 65 \pm 5^\circ\text{C}$ RH=90~95%RH TEST TIME=240± 2Hrs
	HIGH TEMPERATURE STORAGE	EVALUATES DEVICE DURABILITY FOR LONG TERM STORAGE IN HIGH TEMPERATURE $T_a = 85 \pm 5^\circ\text{C}$ (COB: $T_a = 65 \pm 5^\circ\text{C}$) TEST TIME=1000Hrs(-24Hrs, +72Hrs)
	LOW TEMPERATURE STORAGE	EVALUATES DEVICE DURABILITY FOR LONG TERM STORAGE IN LOW TEMPERATURE $T_a = -35 \pm 5^\circ\text{C}$ TEST TIME=1000Hrs(-24Hrs, +72Hrs)
ENVIRONMENTAL TEST	TEMPERATURE CYCLING	EVALUATES RESISTANCE OF DEVICE AT THERMAL STRESSES OR EXPANSION AND CONTRACTION $85^\circ\text{C} \sim 25^\circ\text{C} \sim -35^\circ\text{C} \sim 25^\circ\text{C}$ 30min 5min 30min 5min 10 CYCLES(COB: $T_{\text{hot}}=65^\circ\text{C}$, $T_{\text{cold}}=-25^\circ\text{C}$)
	THERMAL SHOCK	EVALUATES DEVICE STRUCTURE AND STRUCTURE AND MECHANICAL RESISTANCE WHEN SUDDENLY EXPOSED AT SERVE CHANGES $85 \pm 5^\circ\text{C} \sim -35 \pm 5^\circ\text{C}$ 10min 10min 10 CYCLES(COB: $T_{\text{hot}}=65^\circ\text{C}$, $T_{\text{cold}}=-25^\circ\text{C}$)
	SOLDERABILITY	EVALUATES SOLDERABILITY ON LEADS OF DEVICE $T_{\text{SOL}}=230 \pm 5^\circ\text{C}$ DWELL TIME=5±1sec.
	SOLDER RESISTANCE	EVALUATES RESISTANCE TO THERMAL STRESS CAUSED BY SOLDERING $T_{\text{SOL}}=260 \pm 5^\circ\text{C}$ DWELL TIME=10±1sec.

■ Package Pattern 1:

320 pcs / Red Expandable Polyethylene.

1920 pcs / Box(360*175*130mm).

11520 pcs / Carton(550*380*280mm).