



WCN Opto Group Co., Limited

WCNLBA-RYPG12

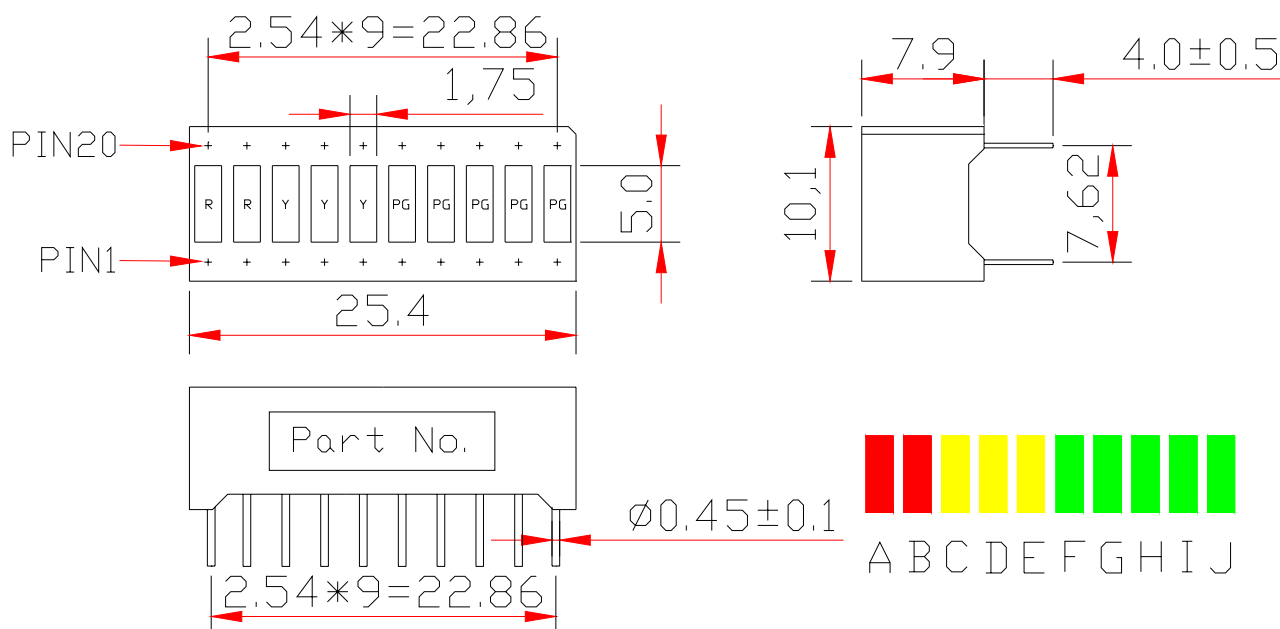
SPECIFICATION

WCN			CUSTOMER Confirmed
Prepared by	Checked by	Approved by	
Fei 2016-7-28	Athena		



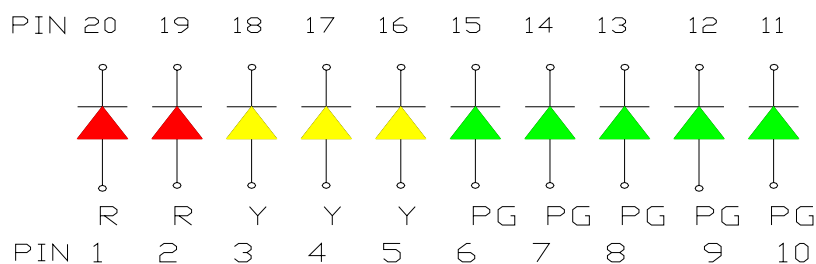
REVISION: A0

Outer Dimension:



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

Circuit Diagram:



Pin Connection:

PIN NO.	CONNECTION	PIN NO.	CONNECTION	PIN NO.	CONNECTION
1	Anode A	8	Anode H	15	Cathode F
2	Anode B	9	Anode I	16	Cathode E
3	Anode C	10	Anode J	17	Cathode D
4	Anode D	11	Cathode J	18	Cathode C
5	Anode E	12	Cathode I	19	Cathode B
6	Anode F	13	Cathode H	20	Cathode A
7	Anode G	14	Cathode G	/	/

■ Features:

- High Reliability
- Color: Red and Yellow and Pure Green
- Low Power Requirement
- Easy Assembly

■ Description:

- Ten Windows Display
- Digit Height 5.00mm(0.20") And Width 1.75mm(0.07")
- Black Face and Milky Bar

■ Absolute Maximum Rating (Ta=25°C):

Parameter	Symbol	Condition	Color	Rating	Units
Power Dissipation Per Bar	P _d	—	Red /Yellow /Pure Green	65/65/90	mW
Forward Current Per Bar	I _F	—	Red /Yellow /Pure Green	25/25/25	mA
Peak Forward Current Per Bar	I _{FP}	1/10 Duty 10KHz	Red /Yellow /Pure Green	100	mA
Reverse Voltage Per Bar	V _R	—	Red /Yellow /Pure Green	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	Color	Location	Rating			Units
					Min.	Typ.	Max.	
Forward Voltage	V _F	I _F =20mA	Red	Per Bar	—	2.00	2.60	V
			Yellow		—	2.00	2.60	
			Pure Gree		—	3.2	3.60	
Reverse Current	I _R	V _R =5V	—	Per Bar	—	—	100	μ A
Luminous Intensity	I _V	I _F =10mA	Red	Per Bar	—	6500	—	ucd
			Yellow		—	11500	—	
			Pure Gree		—	23500	—	
Wave Length	λ _P / λ _D	I _F =20mA	Red	Per Bar	—	633	—	nm
			Yellow		—	588	—	
			Pure Gree		—	525	—	
Luminous Intensity Matching Ratio(Bar to Bar)	I _{V-m}	I _F =10mA	—				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 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: Thot=65°C, Tcold=-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: Thot=65°C, Tcold=-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:

168 pcs / Red Expandable Polyethylene.
1000 pcs / Box(360*175*130mm).
6000 pcs / Carton(550*380*280mm).

Package Pattern B:

20 pcs / IC Tube.
1540 pcs / Box(537*175*125mm).
6160 pcs / Catton(550*380*280mm).