

**WCN Opto Group Co., Limited****Company Name****Harman****Date****2017-11-10****Part No.****WCN355RG-C****Product Group  
Description****数码管****Customer Part No.****C050.042860****Approval Date****Customer  
Confirmation****Approved by****Checked by****Prepared By****Athena  
2017-11-10****Fei  
2017-11-10****Provenance: China****World Components Network Service Ltd****5th Floor,Block A-2,Xuxingda Ind Zone  
Shiyan Town,Bao An District , Shenzhen  
Tel : (86)755-29000022  
Fax : (86)755-29000023****www . wcnopto.net**

**DISPLAY SPECIFICATION****PART NO.: WCN355RG-C****CONTENT**

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## REVISION RECORD

MARKER	Matter for revision	SHEET	DTAE	MAKER	APPOVED SIGN	
	Reason for revision					
A0	P# WCN355RG-C	WHOLE SHEET	2015-11-21	Fei	Athena	
	New Version issued					
A1	Change Outer Dimension	Page.5	2017-03-09	Fei	Athena	
A2	Increase customer type	Page.1	2017-04-10	Fei	Athena	
A3	Increase customer type	Page.1	2017-7-10	Fei	Athena	
A4	Change the materials to improve the quality	Page.5	2017-11-10	Fei	Athena	
	per customer request					

**1. Type No./Manufacture's Name**

WCN355RG-C WCN Opto Group Co., Limited.

**2. Faction: Display Digit Characteristic****3. Epoxy and Overlay type. Black face and White segment.****4. Material and Finish of Lead Terminals:**

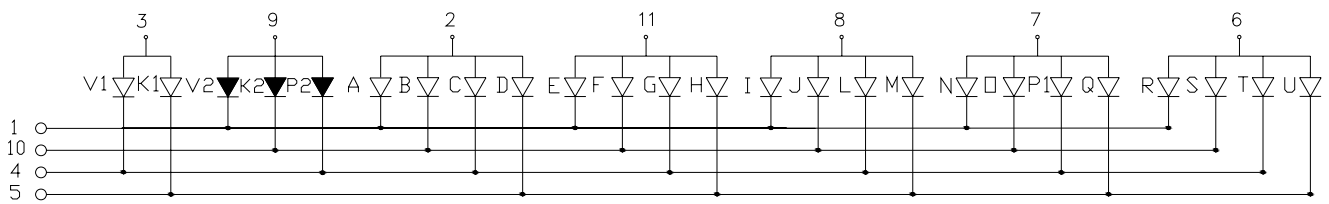
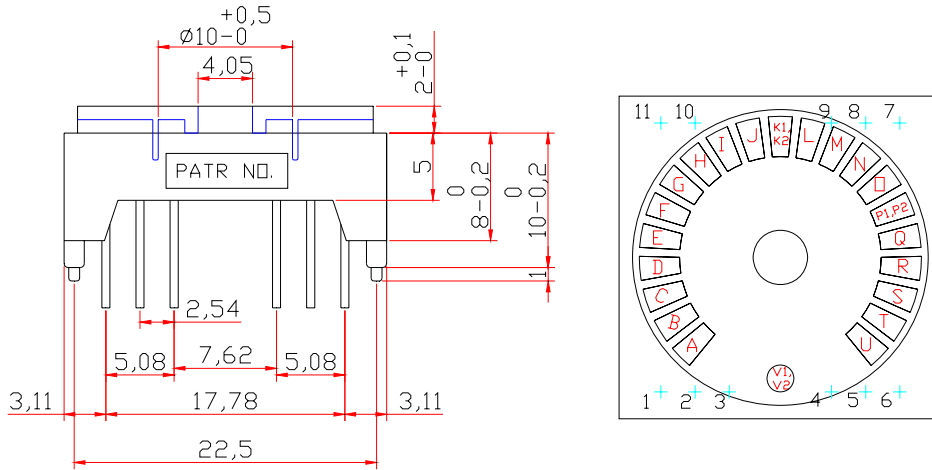
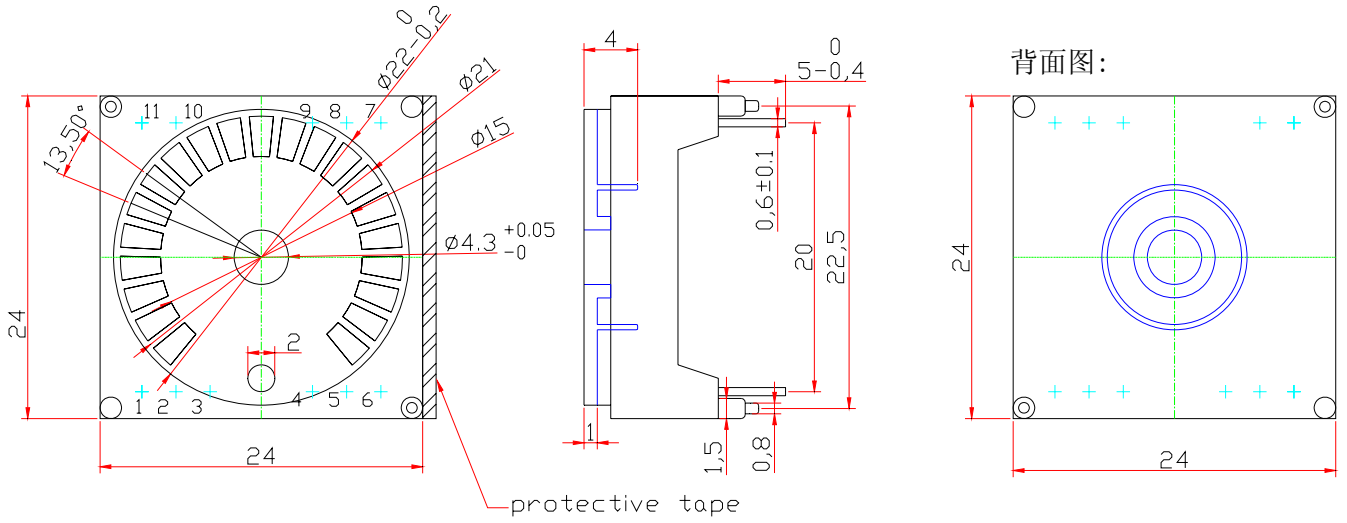
1	Material	Fe(Plating Cu)
2	Finish	Sn

APPEARANCE			DICE TECHNOLOGY	AlGalnp
FACE	SEGMENT	PIN	SOURCE COLOR	Red / Yellow Green
			DRIVER MODE	Com. Cathode
Black	Milky	φ 0.6	PACKING	Plastic tray

**5. Soldering Conditions: Soldering Temp.  $260 \pm 5^{\circ}\text{C}$ , Soldering Time. 3~5 sec.**

(At 2 mm Distance from the Case of Reflector Edge)

### Outer Dimension and Circuit Diagram:



—▷ Yellow Green

—▷ Red

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

**ABSOLUTE MAXIMUM RATINGS AT TA=25°C/Per Dice**

Parameter	Symbol	Condition	Color	Rating	Units
Power Dissipation	Pd	—	Red/ Yellow Green	62.5/ 65	mW
Forward Current	IF	—	Red/ Yellow Green	25/ 25	mA
Peak Forward Current (1/10 Duty Cycle,0.1ms Pulse Width)	IFP	1/10 Duty 10KHz	Red/ Yellow Green	100/ 100	mA
Reverse Voltage	VR	—	Red/ Yellow Green	5/ 5	V
Operating Temperature Range	Topr	—	—	-40~+85	°C
Storage Temperature Range	Tstg	—	—	-40~+85	°C
Junction Temperature				>85	°C

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

Item	Symbol	Test conditions	Location	Rating			Units	
					Min.	Typ.	Max.	
Forward Voltage	VF	IF=20mA	Per Dice	Red	1.80	2.0	2.50	V
				Yellow Green	1.9	2.2	2.60	
Reverse Current	IR	VR=5V	Per Dice	Red	—	—	100	μA
				Yellow Green				
Luminous Intensity	IV	IF=10mA	Per Dice	Red	—	5.0	—	mcd
				Yellow Green	—	3.5	—	
Chromaticity	λP	IF=20mA	Per Dice	Red	—	640	—	nm
				Yellow Green		565		
	λD			Red	630	633	637	
				Yellow Green	568	571	573	
Luminous Intensity Matching Ratio (Segment to Segment)	Iv-m	IF=20mA					1.5:1	

■ **Typical Optical-Electronic Characteristic Curves:**

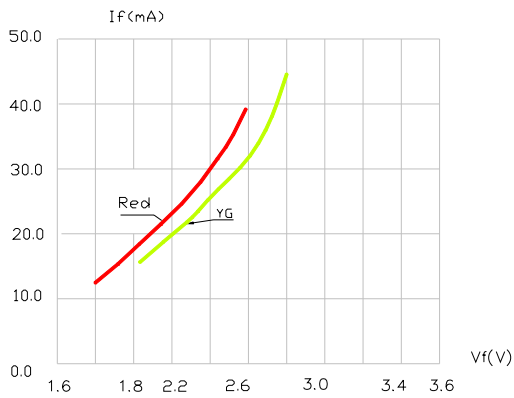


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE

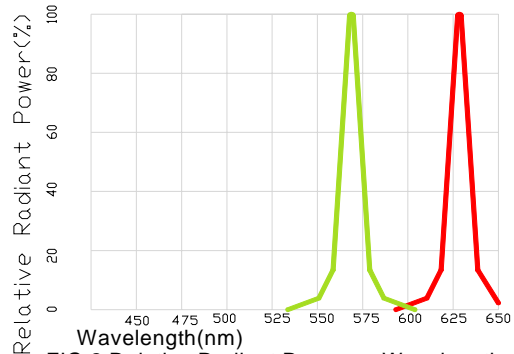


FIG.2 Relative Radiant Power vs. Wavelength

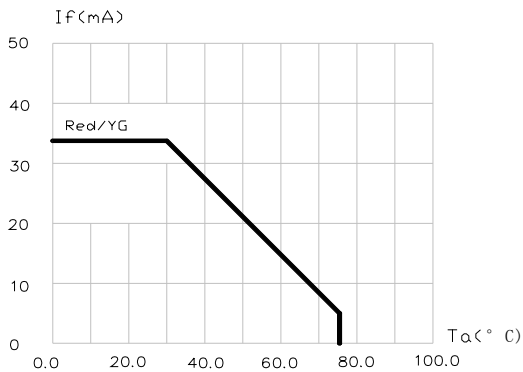


FIG.3 MAXIMUM FORWARD DC CURRENT VS. AMBIENT TEMPERATURE ( $T_{jmax}=95^{\circ}C$ ).

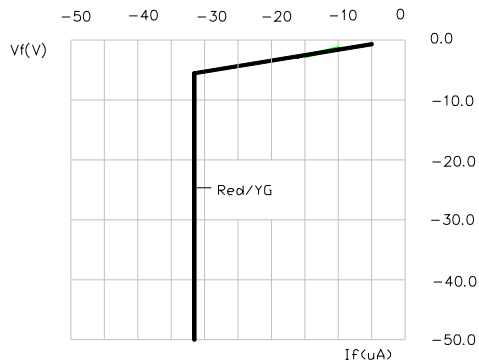


FIG.4 REVERSE CURRENT VS. REVERSE VOLTAGE.

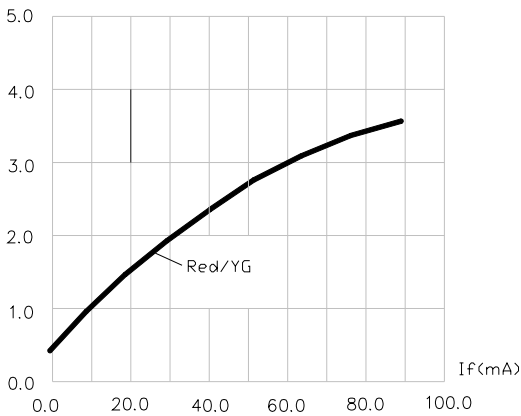


FIG.5 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.