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SPECIFICATION FOR APPROVAL

CUSTOMER	Blume-Newmatik-AAA-LUX BV
CERTIFIED MODEL/TYPE	GRC2R10B
PART NO.	GRC2R10BYB(RoHS+HF)
APPLICATION	
CUSTOMER P/N	
ISSUE DATE	Aug.29,2023
REV. NO.	
REV. DATE	

FOR CUSTOMER APPROVAL	CHECKED BY
	<i>Yuan Feng</i>
	APPROVED BY
	<i>Huairfang Zhang</i>





Gas Discharge Tube Type
Part No.:GRC2R10BYB

REVISED RECORD SHEET

REV. NO	REV. DATE	REVISED CONTENT



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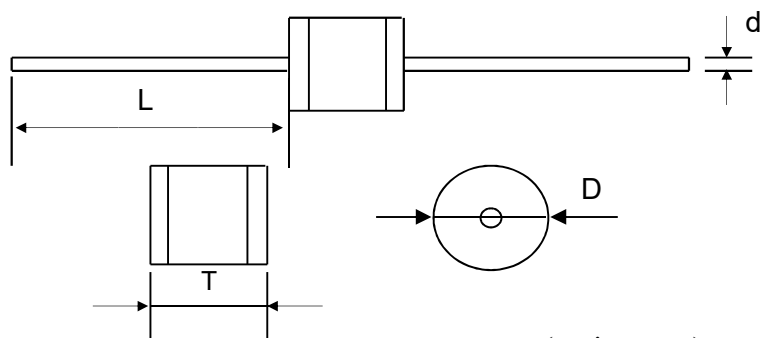
Part number code

Example

G **RC** **2R** **10B** **Y** **B**
(1) (2) (3) (4) (5) (6)

No.	Item	Digit	Specification
(1)	Product Code	G	Thinking Gas Discharge Tube Type
(2)	Type Series(size)	RC	Φ8.0*T6
(3)	Electrode Number	2R	2 Electrodes
(4)	DC Breakdown Voltage	10B	1000V(100V/s)
(5)	Lead Wire Style	Y	Axial Lead
(6)	Packaging	B	Bulk

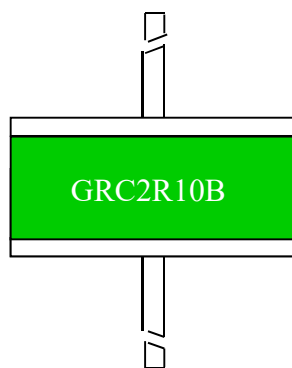
Structure and Dimensions



(unit : mm)

D	T	Lmin	d
8.0±0.2	6±0.2	20	0.8±0.05

Marking



Note:

Marking:print one row;

The tube is green body with white marking.

Electrical Characteristics

Part No.	DC Spark-over Voltage	Max. Impulse Breakdown Voltage		Max. Impulse Discharge Current (8/20 μ s)	
	(100V/s)	(100V/ μ s)	(1KV/ μ s)	1time	10 times
	(V)	(V)	(V)	(KA)	(KA)
GRC2R10BYB	1000±20%	1400	1500	10	5

Part No.	Arc Voltage (on state Voltage) @1Amp	Max Follow on Current	Min. Insulation Resistance	Max. Capacitance	Operation and storage temperature
	TYP	Amps	(G Ω)	@1MHz	(°C)
				(pF)	
GRC2R10BYB	~25	200A ⁽¹⁾	10	1.5	-40~125

Note:

(1).Tested to UL1449-Conducted with suitable MOV connected in series.

Reliability

Item	Standard	Test conditions / Methods			Specifications																
Tensile Strength of Terminals	IEC60068-2-21	Along the axial direction ,apply the force specified below to each terminal and keeping the unit fixed on each terminal for 10±1s <table><tr><td>Terminal diameter (mm)</td><td>Force (kg)</td></tr><tr><td>0.8</td><td>1.0</td></tr><tr><td>1.0</td><td>2.0</td></tr></table>			Terminal diameter (mm)	Force (kg)	0.8	1.0	1.0	2.0	No visible damage										
Terminal diameter (mm)	Force (kg)																				
0.8	1.0																				
1.0	2.0																				
Solderability	IEC60068-2-20	245 ± 3 °C , 3 ± 0.3sec			at least 95% of terminal electrode is covered by new solder																
Resistance to soldering heat	IEC60068-2-20	260 ± 3 °C , 10 ± 1sec			ΔV/V ≤25% No visible damage																
Temperature Cycle Test	IEC60068-2-14	The thermal shock conditions shown below shall be repeated 5 cycles <table><tr><td>Step</td><td>Temperature (°C)</td><td>Period (minutes)</td></tr><tr><td>1</td><td>-40 ± 2</td><td>30</td></tr><tr><td>2</td><td>Room temperature</td><td>4</td></tr><tr><td>3</td><td>125 ± 2</td><td>30</td></tr><tr><td>4</td><td>Room temperature</td><td>4</td></tr></table>			Step	Temperature (°C)	Period (minutes)	1	-40 ± 2	30	2	Room temperature	4	3	125 ± 2	30	4	Room temperature	4	ΔV/V ≤25% No visible damage	
Step	Temperature (°C)	Period (minutes)																			
1	-40 ± 2	30																			
2	Room temperature	4																			
3	125 ± 2	30																			
4	Room temperature	4																			
Humidity Resistance	IEC60068-2-3	40 ± 2°C , 9 0 ~ 95 % RH , 1000 ± 24hrs			ΔV/V ≤25% No visible damage																
High Temp. Storage	GB/T9043 7.7	125 ± 2 °C , 2 hrs			ΔV/V ≤25% No visible damage																
Low Temp. Storage	GB/T9043 7.8	-40± 2 °C , 2 hrs			ΔV/V ≤25% No visible damage																



Packaging

1、 Bulk

Quantity: 100pcs per PS Box;
 500pcs per Inner Box

Restrictively used substances

We hereby declare that the components delivered to your company are compliant with EC RoHS Directive (2015/863/EU).

Storage Conditions of Products

(I) Storage Conditions :

1.Warehouse Storage Temperature : $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$

Storage Temperature : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

2.Relative humidity : $\leq 75\% \text{RH}$

3.Gas Discharge Tube must be kept away from sunlight and stored in a non-corrosive atmosphere.

(II) Period of Storage : 1 year

Safety Approvals



* UL 1449 4th / cUL recognized (File # E314979)

Certificates

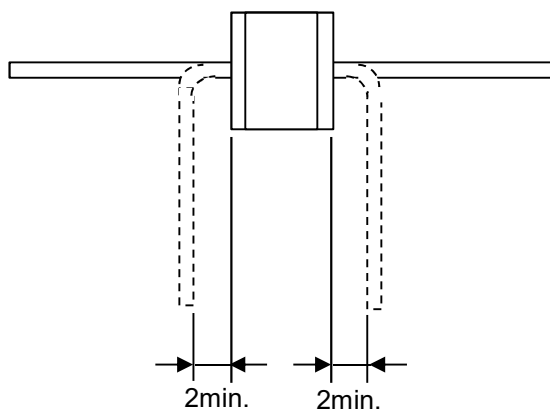
- (1) ISO9001 certificate

Test Report

- (1) RoHS SGS test report
- (2) Halogen-free SGS test report

Cautions and Warnings

Mounting instructions for bending lead wire of GDT



It is possible to shorten and bend lead wire of gas discharge tube during procession. Therefore, it is necessary to ensure metal-ceramic compound (electrode/ceramic insulation body) is not affected by mechanical stress and sudden stress.

Minimum distance between the body and the bending point is 2mm (please refer to the picture above), and which ensures strength of welding point between lead wire and electrode is not decreased.