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SPECIFICATION FOR APPROVAL

CUSTOMER	TRG
CERTIFIED MODEL/TYPE	GD82R350
PART NO.	GD82R350AB(RoHS+HF)
APPLICATION	
CUSTOMER P/N	
ISSUE DATE	Oct.25,2012
REV. NO.	
REV. DATE	

FOR CUSTOMER APPROVAL	CHECKED BY
	Jingjie Zhu
	APPROVED BY
	Kejian Tu





REVISED RECORD SHEET

REV. NO	REV. DATE	REVISED CONTENT



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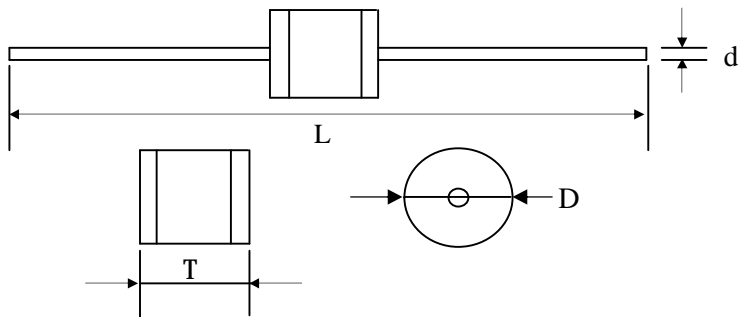
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Part number code

Example

G **D8** **2R** **350** **A** **B**
 (1) (2) (3) (4) (5) (6)

No.	Item	Digit	Specification
(1)	Product Code	G	Thinking Gas Discharge Tube Type
(2)	Type Series(size)	D8	Φ8.0*T6
(3)	Electrode Number	2R	2 Electrodes
(4)	DC Breakdown Voltage	350	350V(100V/s)
(5)	Lead Wire Style	A	Axial Lead
(6)	Packaging	B	Bulk

Structure and Dimensions

(unit : mm)

D	T	L	d
8.0±0.3	6.0±0.3	60.0±4.0	0.8±0.05

Electrical Characteristics

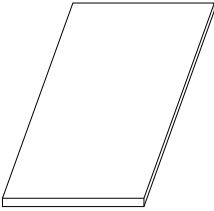
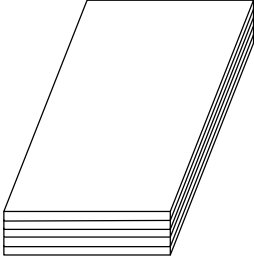
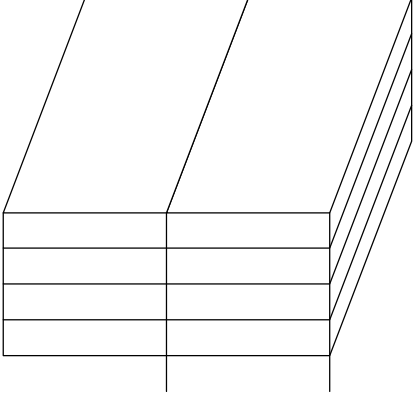
Part No.	DC Spark-over Voltage	Max. Impulse Breakdown Voltage		Max. Impulse Discharge Current (8/20 μ s)	
	(100V/s)	(100V/ μ s)	(1KV/ μ s)	1time	10 times
	(V)	(V)	(V)	(KA)	(KA)
GD82R350AB	350±20%	700	900	15	10

Part No.	Impulse Life (10/1000 μ s)	Normal Alternating Discharge Current	DC Holdover Voltage	Min. Insulation Resistance	Max. Capacitance
	100A	50Hz, 1s	< 150ms	(G Ω)	@ 1MHz
	Times	(A)	(V)		(pF)
GD82R350AB	500	5	150	1	1.5

Reliability

Item	Standard	Test conditions / Methods	Specifications															
Tensile Strength of Terminals	IEC68-2-21	Along the axial direction ,apply the force specified below to each terminal and keeping the unit fixed on each terminal for 10±1s <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Terminal diameter (mm)</td> <td style="text-align: center;">Force (kg)</td> </tr> <tr> <td style="text-align: center;">$0.8 < d \leq 1.25$</td> <td style="text-align: center;">1.0</td> </tr> </table>	Terminal diameter (mm)	Force (kg)	$0.8 < d \leq 1.25$	1.0	$ \Delta V/V \leq 10\%$ No visible damage											
Terminal diameter (mm)	Force (kg)																	
$0.8 < d \leq 1.25$	1.0																	
Bending Strength of Terminals	IEC68-2-21	Apply the force specified below to each terminal, and bend the terminal by 90° at the point of 2mm from the body ,then 90° in the opposite direction ,and again back to the original position <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Terminal diameter (mm)</td> <td style="text-align: center;">Force (kg)</td> </tr> <tr> <td style="text-align: center;">$0.8 < d \leq 1.25$</td> <td style="text-align: center;">0.5</td> </tr> </table>	Terminal diameter (mm)	Force (kg)	$0.8 < d \leq 1.25$	0.5	$ \Delta V/V \leq 10\%$ No visible damage											
Terminal diameter (mm)	Force (kg)																	
$0.8 < d \leq 1.25$	0.5																	
Solderability	IEC68-2-20	245 ± 3 °C , 3 ± 0.3sec	at least 95% of terminal electrode is covered by new solder															
Resistance to soldering heat	IEC68-2-20	260 ± 3 °C , 10 ± 1sec	$ \Delta V/V \leq 10\%$ No visible damage															
Temperature Cycle Test	IEC68-2-14	The thermal shock conditions shown below shall be repeated 5 cycles <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Step</th> <th>Temperature (°C)</th> <th>Period (minutes)</th> </tr> </thead> <tbody> <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>85 ± 2</td> <td>30</td> </tr> <tr> <td>4</td> <td>Room temperature</td> <td>4</td> </tr> </tbody> </table>	Step	Temperature (°C)	Period (minutes)	1	-40 ± 2	30	2	Room temperature	4	3	85 ± 2	30	4	Room temperature	4	$ \Delta V/V \leq 10\%$ No visible damage
Step	Temperature (°C)	Period (minutes)																
1	-40 ± 2	30																
2	Room temperature	4																
3	85 ± 2	30																
4	Room temperature	4																
Humidity Resistance	IEC68-2-3	40 ± 2°C , 90 ~ 95 % RH , 1000 ± 2hrs	$ \Delta V/V \leq 10\%$ No visible damage															
High Temp. Storage	IEC68-2-2	85 ± 2 °C , 2 hrs	$ \Delta V/V \leq 10\%$ No visible damage															
Low Temp. Storage	IEC68-2-1	-40± 2 °C , 2 hrs	$ \Delta V/V \leq 10\%$ No visible damage															

Packaging

PS Box	Inner Box	Outside Box
(252×135×10mm)	(270×145×50mm)	(310×280×275mm)
100pcs	500pcs	5000pcs
		



Restrictively used substances

We hereby declare that the components delivered to your company are compliant with EC RoHS Directive (2002/95/EC).

Warehouse Storage Conditions of Products

(I) Storage Conditions :

- 1.Storage Temperature : $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$
- 2.Relative humidity : $\leq 75\% \text{RH}$
- 3.Keep away from corrosive atmosphere and sunlight.

(II) Period of Storage : 1 year

Safety Approvals (Certified Model/Type : GD82R350)



* UL 497B recognized (File # E245070)

Certificates

- (1) QS9000 certificate

Test Report

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