



## Features

- Extremely fast response time
- Stable performance over life
- Very low capacitance
- High insulation resistance
- Extremely small size

## Applications

- Power lines
- Automotive and Telecommunication
- Computers & Consumer Electronics
- Industrial Electronics

# VGT2R600---- GAS DISCHARGE TUBE

## General Information

This product is suitable for communication equipments and other electronic equipments for transient over-voltage protection against high voltage and lightning damage.

Standard: GB/T9043-2008《General technical requirements of gas discharge tubes for the over-voltage protection of telecommunications installations》.



## Absolute Maximum Ratings

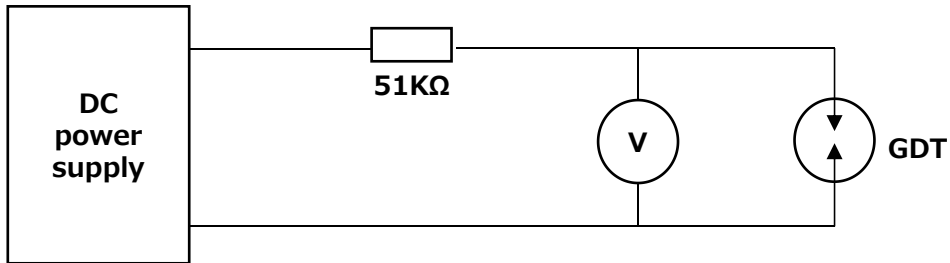
Parameter	Symbol	Value	Unit
Standard	---	GB/T9043-2008	V
Maximum Operating temperature	T <sub>OPER</sub>	-40 to +90	°C
Maximum Storage temperature	T <sub>STG</sub>	-55 to +125	°C
Maximum lead temperature for soldering during 10s	T <sub>L</sub>	260	°C

## Electrical Characteristics (@ T<sub>A</sub> = 25 °C Unless Otherwise Noted)

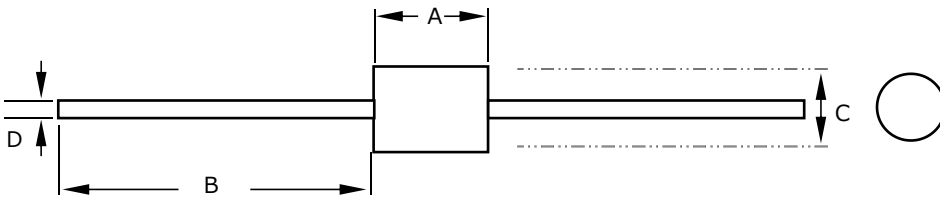
Parameter	Value	Unit
DC Spark-over voltage @100V/s	600±20%	V
Maximum Impulse Spark-over Voltage @1000V/us	≤1300	V
Insulation resistance at DC 250V	≥1	GΩ
Capacitance at 1MHz	≤2	pF
Nominal Impulse Discharge Current	10	KA
Alternating Discharge Current @50Hz,1sec	10	A
Impulse Life @10/1000us,100A	500	times

## Test methods

The test circuit is shown in Figure 1. The DC voltage rise speed of test power supply is 100V/s, Discharging current is limited to 5~15mA. The positive and reverse polarity spark-over voltage of product should be tested in discharge inter-electrode.

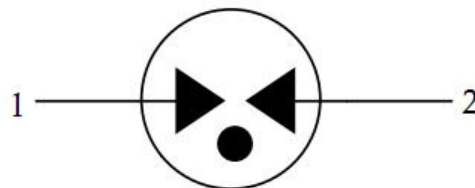


## Product Dimensions



Dimension	MM (INCHES)
A	5.80-6.20 (0.228-0.244)
B	28.00 <sup>MIN</sup> (1.10)
C	5.30-5.70 (0.208-0.224)
D	0.80 (0.031)

## Schematic Symbol





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## Recommendable reflow soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate (T <sub>smax</sub> to T <sub>p</sub> )	3 °C/secondmax.
Preheat	
-Temperature Min(T <sub>smin</sub> )	150 °C
-Temperature Max(T <sub>smax</sub> )	200 °C
-Time(T <sub>smin</sub> to T <sub>smax</sub> )	60-180seconds
Time maintained above:	
-Temperature(T <sub>L</sub> )	217 °C
-Time(t <sub>L</sub> )	60-150 seconds
Peak/Classification Temperature(T <sub>p</sub> )	260°C
Time within 5°C of actual Peak Temperature(t <sub>p</sub> )	20-40 seconds
Ramp-Down Rate	6°C/secondmax.
Time 25°C to Peak Temperature	8 minutes max.

