

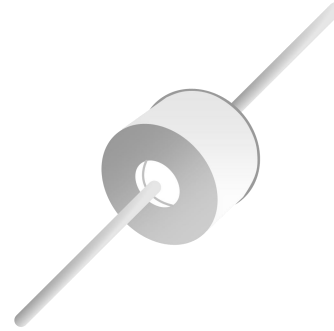
## Gas Discharge Tube in single package

### Description

GDTs of RDSEMI are designed compliant with industrial specification of ITU-T K.12 2000 and national standards of GB/T 9043 2002, could meet over voltage transients protection requirements of lightning strikes, power cross and induction in both telecommunication equipments and power lines.

### Features

- High Current Handling Capability
- Low Capacitance
- Fast Response
- Long Service Life
- Extremely low capacitance (<1.5pF)



### Mechanical Data

- **Case:**  $\phi 8 \times 8$ mm(plastic package).  
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

### Application

- Modem
- Splitter
- Base stations

### Electrical specifications

Part number	DC Spark-over Voltage <sup>1) 2)</sup>	Maximum Impulse Spark-over Voltage	Impulse Discharge Current <sup>3)</sup>	Alternating Discharge Current	Insulation resistance	Capacitance
	100v/s	1kv/ $\mu$ s	8/20 $\mu$ s 10times	50Hz	@ 100V <sub>DC</sub>	@ 1 MHz
	(V)	(V)	(KA)	(A)	(G $\Omega$ )	(pF)
CG2R075-T8	75 $\pm$ 20%	550	20	20	> 10	< 1.5
CG2R090-T8	90 $\pm$ 20%	600	20	20	> 10	< 1.5
CG2R150-T8	150 $\pm$ 20%	600	20	20	> 10	< 1.5
CG2R230-T8	230 $\pm$ 20%	650	20	20	> 10	< 1.5
CG2R350-T8	350 $\pm$ 20%	700	20	20	> 10	< 1.5
CG2R470-T8	470 $\pm$ 20%	800	20	20	> 10	< 1.5
CG2R600-T8	600 $\pm$ 20%	1000	20	20	> 10	< 1.5
CG2R800-T8	800 $\pm$ 20%	1200	20	20	> 10	< 1.5

1) At delivery AQL 0.65 level II, DIN ISO 2859.

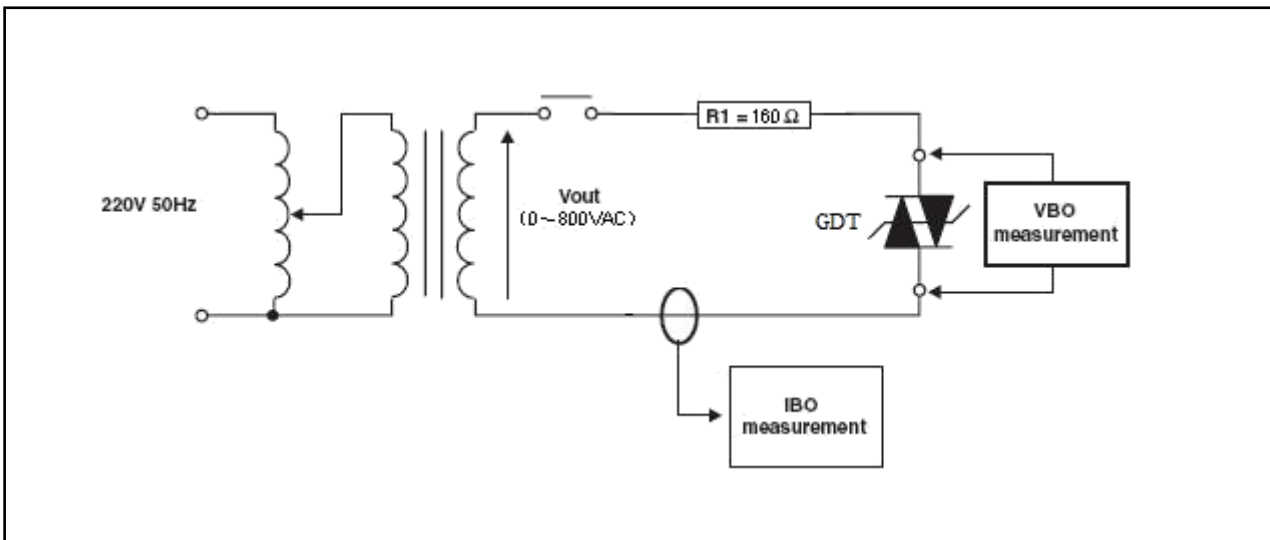
2) In ionized mode.

3) Tests according to ITU-T Rec. K. 12 and UL 497B.

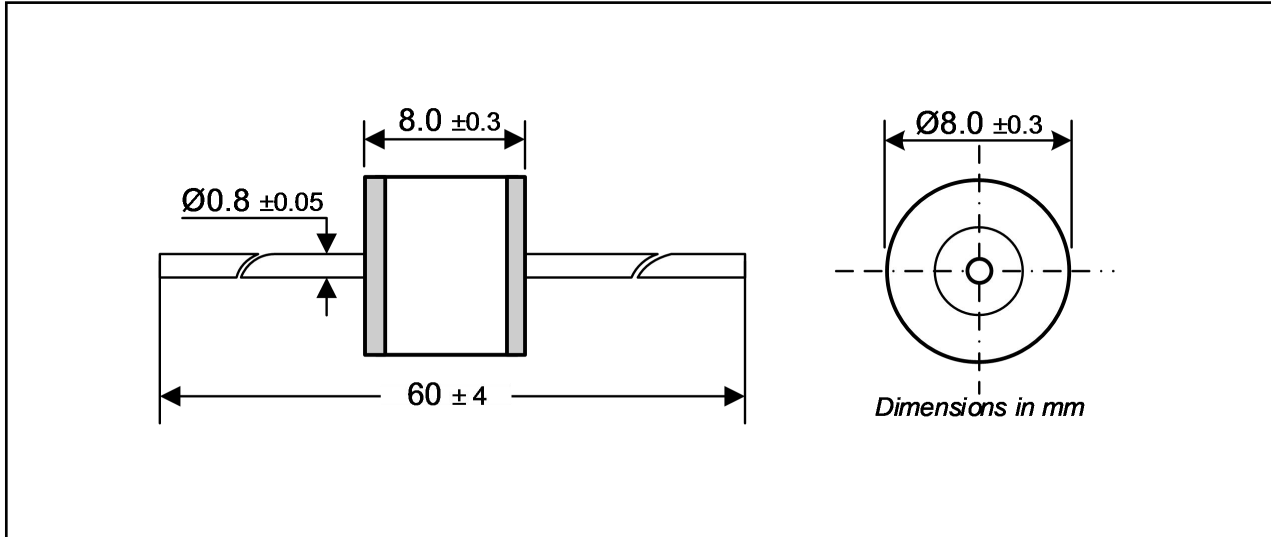
### Heat Characteristic

Emblem	parameter	numerical value	unit
$T_J$	Task scope	-40~+150℃	℃
$T_S$	Temperature save up scope	-65~+150℃	℃
$R_{\theta JA}$	Heat resistance	90	℃/W

### Direct current VBO test circuit



### Package Dimensions



### Cautions and warnings

- Gas Discharge Tubes must not be operated directly in power supply networks.
- Gas Discharge Tubes may become hot in case of longer periods of current stress (danger of burning).
- Gas Discharge Tubes may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged Gas Discharge Tubes must not be re-used.

### Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CG2Rxxx-T8 Series			1000pcs / BOX	EIA STD RS-481

### Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

## CAUTION / WARNING

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