

Gas Discharge Tube in SMD 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:** $\phi 8 \times 6$ 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 ^{1) 2)}	Maximum Impulse Spark-over Voltage	Impulse Discharge Current ³⁾	Alternating Discharge Current	Insulation resistance	Capacitance
	100v/s	1kv/ μ s	8/20 μ s 10times	50Hz	@ 100V _{DC}	@ 1 MHz
	(V)	(V)	(KA)	(A)	(G Ω)	(pF)
CG2R075-M8	75 \pm 20%	550	20	20	> 10	< 1.5
CG2R090-M8	90 \pm 20%	600	20	20	> 10	< 1.5
CG2R150-M8	150 \pm 20%	600	20	20	> 10	< 1.5
CG2R230-M8	230 \pm 20%	650	20	20	> 10	< 1.5
CG2R350-M8	350 \pm 20%	700	20	20	> 10	< 1.5
CG2R470-M8	470 \pm 20%	800	20	20	> 10	< 1.5
CG2R600-M8	600 \pm 20%	1000	20	20	> 10	< 1.5
CG2R800-M8	800 \pm 20%	1200	20	20	> 10	< 1.5

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

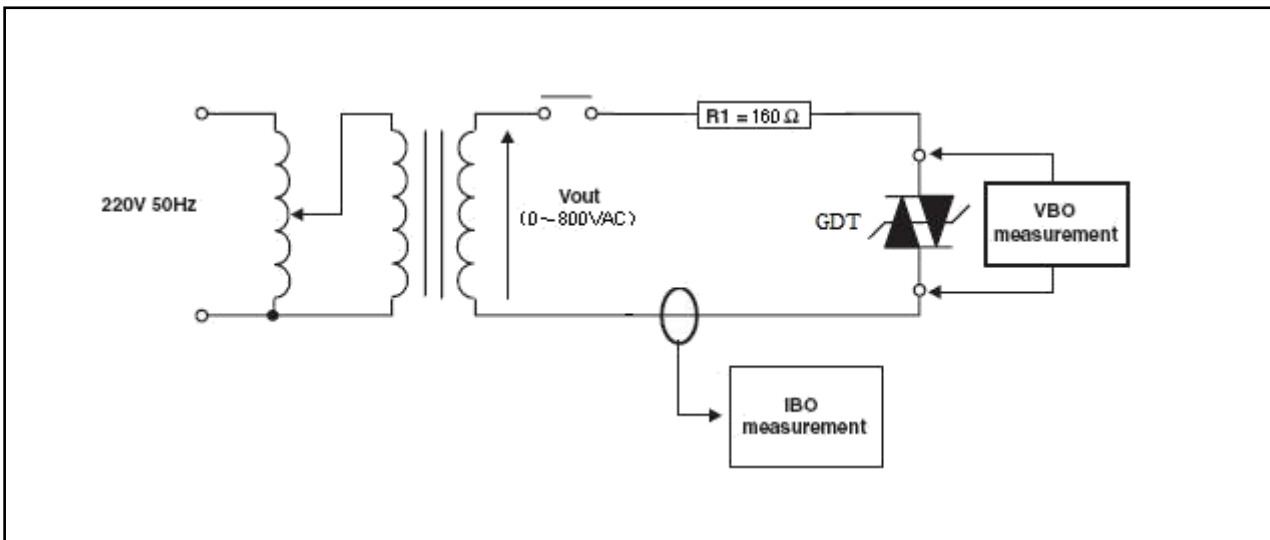
2) In ionized mode.

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

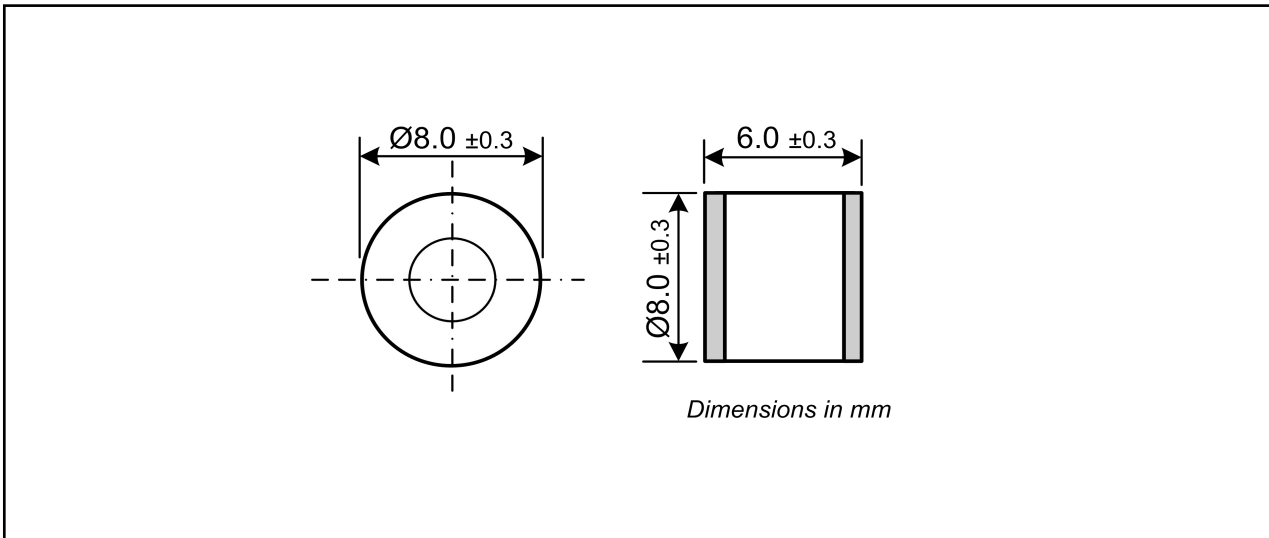
Heat Characteristic

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-M8 Series	Φ 8.0X6.0	Tape and reel	1000pcs / BOX	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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