

# Gas Discharge Tube in SMD package

### **Description**

GDTs of RDSEMI are designed compliant with industrial specification of ITU-T K.12 2000 and national standars 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**

- 3-electrode arrester
- Very small size
- Extremely fast response time
- Stable performance over life
- Extremely low capacitance (<1.2pF)
- High insulation resistance



#### **Mechanical Data**

- Case: φ5\*7.5mm(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



## Specifications (@25℃)

Part number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Service Life	Insulation resistance	Capacitance
	100V/s	1kv/µs	8/20µs 10times	@ 100V <sub>DC</sub>	@ 1 MHz
	(V)	(V)	(KA)	$(M\Omega)$	(pF)
CG3R075L-M5	75±25%	650	10	> 1000	< 1.2
CG3R090L-M5	90±25%	650	10	> 1000	< 1.2
CG3R150L-M5	150±20%	650	10	> 1000	< 1.2
CG3R230L-M5	230±20%	700	10	> 1000	< 1.2
CG3R300L-M5	300±20%	800	10	> 1000	< 1.2
CG3R350L-M5	350±20%	800	10	> 1000	< 1.2
CG3R400L-M5	400±20%	900	10	> 1000	< 1.2
CG3R420L-M5	400±20%	900	10	> 1000	< 1.2
CG3R470L-M5	420±20%	950	10	> 1000	< 1.2
CG3R600L-M5	600±20%	1050	10	> 1000	< 1.2

<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859.

Terms and current waveforms in accordance with: ITU-T Rec. K.12; IEC 61643-21 and DIN 57845/VDE0845.

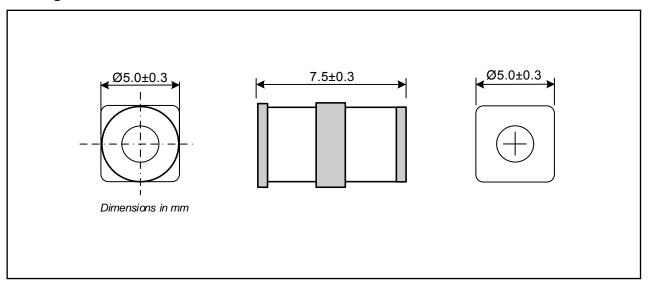
www.rdsemi.com 2 REV.1.0

<sup>2)</sup> In ionized mode.

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



# **Package Dimensions**



# **Ordering information**

Order code	Package	Packaging option	Base quantity	Packaging specification
CG3R-M5 Series		Tape and reel	1000pcs / reel	EIA STD RS-481

# **Revision history**

Date	Revision	Changes
23-May-2020	1.0	Initial release



#### **CAUTION / WARNING**

Information in this document is believed to be accurate and reliable. However, RDSEMI does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information.

Users should independently evaluate the suitability of and test each product selected for their own applications, and RDSEMI assumes no liability what's ever relating to the choice, selection or use of the RDSEMI products and services described herein.

RDSEMI reserves the right to change or update, without notice, any information contained in this publication; to change, without notice, the design, construction, processing, or specification of any product; and to discontinue or limit production or distribution of any product

Information in this document supersedes and replaces all information previously supplied.

Products are not designed, authorized or warranted to be suitable for use in medical, military, aircraft, space or life support equipment, nor in applications where failure or malfunction of an RDSEMI product can reasonably be expected to result in personal injury, death or severe property or environmental damage. RDSEMI accepts no liability for inclusion and/or use of RDSEMI products in such equipment or applications and therefore such inclusion and/or use is at the customer's own risk.

This document as well as the item(s) described herein may be subject to export control regulations. Export might require a prior authorization from national authorities.

Resale of RDSEMI products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by RDSEMI for the RDSEMI product or service described herein and shall not create or extend in any manner whatsoever, any liability of RDSEMI.

RDSEMI expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. RDSEMI only obligations are those in the RDSEMI Standard Terms and Conditions of Sale and in no case will RDSEMI be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of its products.

Specifications are subject to change without notice © Copyright 2020, DaJing Semiconductor All rights reserved