Gas Discharge Tube in DIP 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 (<1pF)
- High insulation resistance

Mechanical Data

- **Case:** φ6*8mm(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

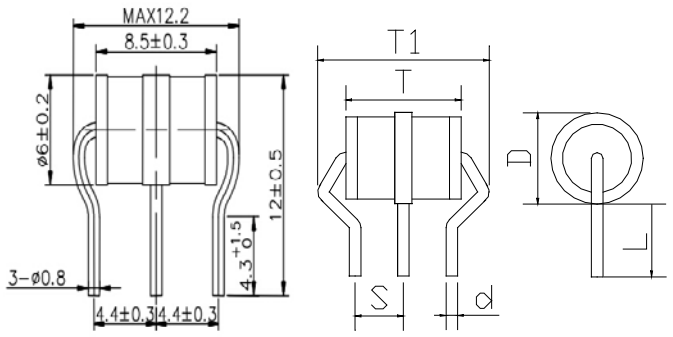
Application

- Modem
- Splitter
- Base stations

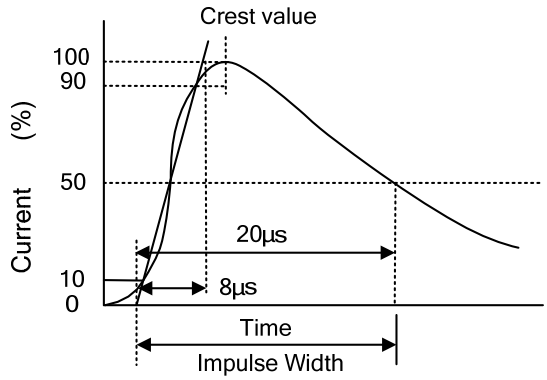
Specifications（@25℃）

Part No.	DC Breakdown Voltage (V)	Maximum Impulse Breakdown Voltage (V)		Maximum Impulse Discharge Current (8/20 μs) (KA)		Normal Alternating Discharge CurrentA)		Impulse Life (10/1000μs) (100A)	DC Holdover Voltage (V)	Minimum Insulation Resistance (GΩ)	Maximum Capacitance (pf)
	100V/s	100V/μs	1000V/μs	1 time	10 times	50Hz, 1sec	Single 9cycles	times	< 150ms	Note2	1MHZ
CG3R075L-T6	75±20%	600	700	10	5	5	15	300	52	1	1
CG3R090L-T6	90±20%	600	700						52	1	1
CG3R151L-T6	150±20%	500	700						52	1	1
CG3R201L-T6	200±20%	500	700						52	1	1
CG3R231L-T6	230±20%	600	700						52	1	1
CG3R251L-T6	250±20%	600	700						52	1	1
CG3R351L-T6	350±20%	700	900						80	1	1
CG3R401L-T6	400±20%	800	1000						80	1	1
CG3R421L-T6	420±20%	800	1000						150	1	1
CG3R471L-T6	470±20%	1100	1400						150	1	1
CG3R601L-T6	600±20%	1200	1500						150	1	1

Package Dimensions



Item	Dimensions	
	Spec.	Tolerance
D	6.0	+0.2,-0.8
T	12.20	±0.5
T1	8.50	+0.8,-0.5
L	7.5	±0.5
S	4.4	±0.4
d	1.0	±0.05

Items	Test Condition/Description	Requirement
DC Spark-over Voltage	The voltage is measured with voltage ramp dv/dt=100V/s. Test is between each side electrode and center electrode.	To meet the specified value
Maximum Impulse Spark-over Voltage	The maximum impulse spark-over voltage is measured with voltage ramp dv/dt=1000V/μs. Test is between each side electrode and center electrode.	
Impulse Discharge Current	Maximum surge current that can be applied through center electrode with 8/20μs waveform, for 10 times with 3min interval time, which will be equally divided between each side electrode to center electrode, without causing the DC breakdown voltage to change more than 25% from its initial measured value. 	
Alternating Discharge Current	Rated RMS value of AC current at 50Hz, 1 sec. for 10 times with interval time 3 min. DC spark-over voltage shall not change more than ±25% from its initial value. Test is between each side electrode and center electrode. IR＞10^8 ohms (-20%, +30% for 70~90V).	
Insulation Resistance	The resistance of gas tube shall be measured between each side electrodes and center electrode.	
Capacitance	The capacitance of gas tube shall be measured between each side electrodes and center electrode. Test frequency: 1MHz	

Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CG3R-T6 Series			1000pcs / Box	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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