GAS DISCHARGE TUBE -GDT/SMD1812 SERIES

Description

Circuit Protection2Pole GDTs (ceramic gas discharge tubes), are commonly used to help protect sensitive telecom equipment such as communication lines, signal lines and data transmission lines from damage caused by transient surge voltages that typically result from lightning strikes and equipment switching operations.

Circuit Protection GDTs offer a high level of surge protection, low capacitance and a broad array of breakover voltage levels, making them suitable for applications such as MDF (Main Distribution Frame) modules, high data-rate telecom applications (e.g. ADSL, VDSL), and surge protection on power lines. Circuit Protection GDTs can help equipment meet the most stringent regulatory standards.

Feature

- Size4532(1812)
- High insulation resistance.
- Crowbar overvoltage protection
- Low capacitance and insertion loss
- Optional fail-short mechanism on some devices
- Devices tested per ITU K.12 recommendations

2 Electrode GDT Graphical Symbol

Applications

- Telephone Interface,Line cards.
- Data communication equipment.
- Repeaters,Modems.
- Line test equipment.

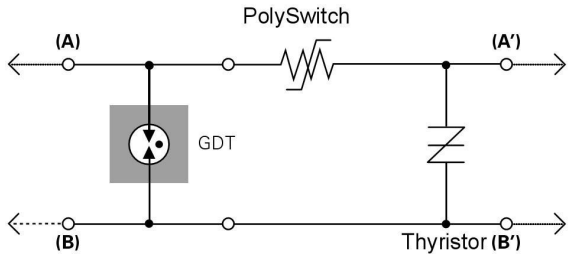


Fig. 1

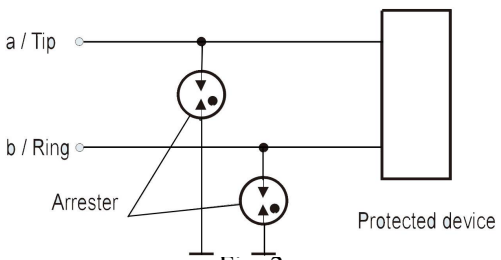
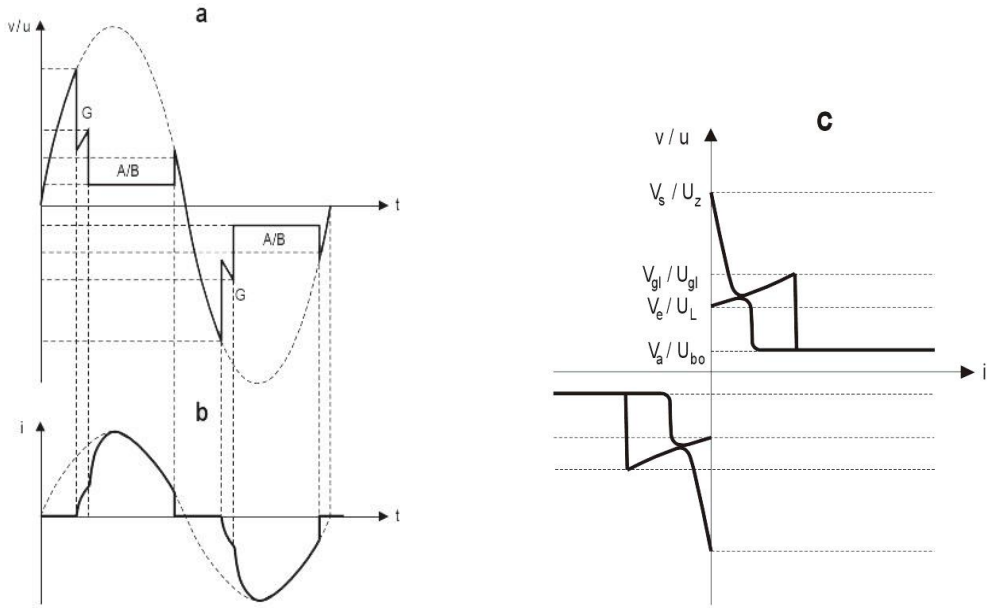


Fig. 2

Electrical Characteristics

Part Number	DC Spark-over Voltage	Impulse Life Test	Minimum Insulation Resistance		Maximum Capacitance	Nominal Impulse Discharge Current	Impulse Discharge Voltage
	100V/s (V)	Times(8/20 μ s 100A)	Test Voltage(V)	(GΩ)	1MHz (pF)	8/20μs	10/700 uS(±5 Times)
GDT/SMD1812-071	75±30%	300	50	1	0.5	2KA	4KV
GDT/SMD1812-091	90±30%	300	50	1	0.5	2KA	4KV
GDT/SMD1812-121	120±30%	300	50	1	0.5	2KA	4KV
GDT/SMD1812-151	150±30%	300	50	1	0.5	2KA	4KV
GDT/SMD1812-201	200±30%	300	100	1	0.5	2KA	4KV
GDT/SMD1812-231	230±30%	300	100	1	0.5	2KA	4KV
GDT/SMD1812-301	300±30%	300	100	1	0.5	2KA	4KV
GDT/SMD1812-351	350±30%	300	100	1	0.5	2KA	4KV
GDT/SMD1812-401	400±30%	300	100	1	0.5	2KA	4KV
GDT/SMD1812-421	420±30%	300	100	1	0.5	2KA	4KV
GDT/SMD1812-471	470±30%	300	100	1	0.5	2KA	4KV
GDT/SMD1812-501	500±30%	300	100	1	0.5	2KA	4KV
GDT/SMD1812-601	600±30%	300	100	1	0.5	2KA	4KV

Limitation of a sinusoidal overvoltage by a surge arrester

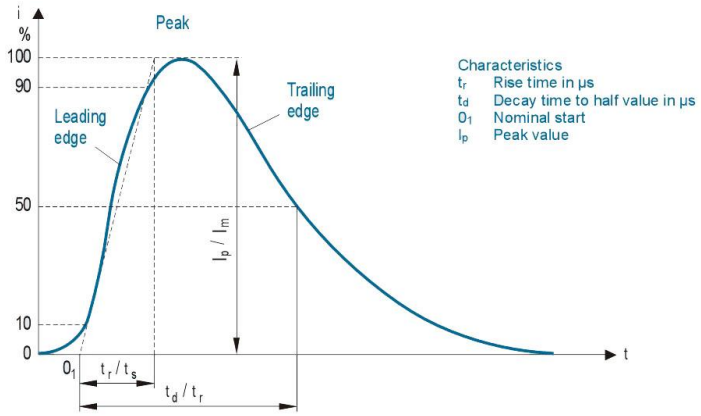


a : shows the voltage curve at the arrester

b: the current as a function of time when limiting a sinusoidal voltage surge.

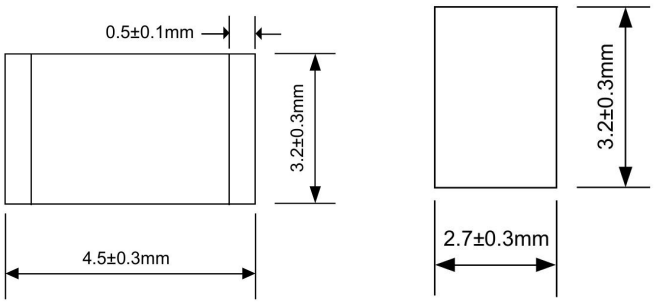
c: The V/I characteristic of the surge arrester was obtained by combining the graphs of voltage and current as a function of time.

Standard impulse discharge current 8/20 μs

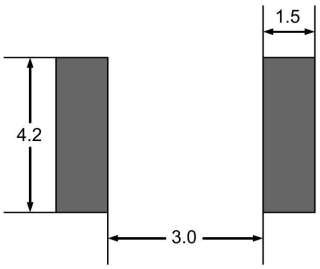


Rated discharge current of the 8/20 μs wave

PACKAGE OUTLINE DIMENSIONS in millimeters :**SMD1812**



Mounting Pad Layout



Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.