TECH PUBLIC
台舟电子

TPSMD4532 Series
GDT Protection Component

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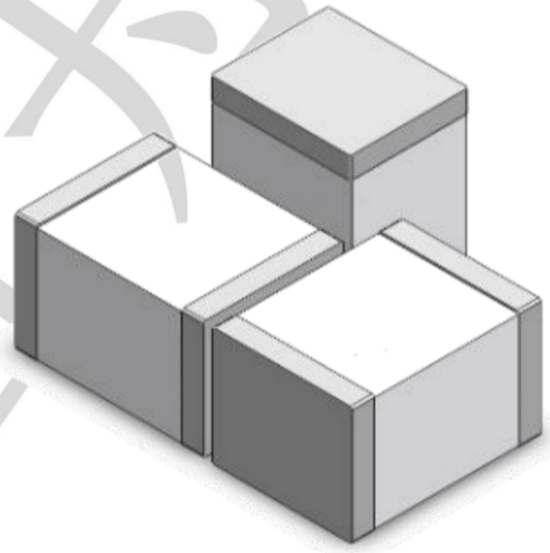
Features

- High insulation resistance
- 4KV 10/700μs maximum surge rating in accordance with ITU-TK.21
- Ultra low capacitance(<1pF)
- Surface mounted gas arrester
- Size 4532(1812)
- 2.0KA /1KAsurge capability tested with 8/20μs pulse as defined by IEC 61000-4-5
- Meets MSL level 1
- Storage and operating temperature: -40 ~ +85℃

Applications

- Communication equipment
- CATV equipment
- Test equipment
- Data lines
- Power supplies
- Telecom SLIC protection
- Broadband equipment
- ADSL equipment, includingADSL2+
- XDSL equipment
- Satellite and CATV equipment
- General telecom equipment



4532(1812)

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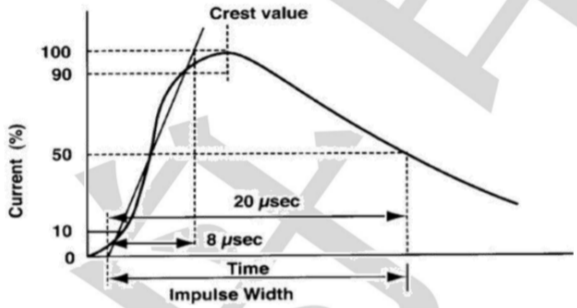
Electrical Characteristics (TA=25°C unless otherwise specified)

Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Minimum Insulatio Resistance	Capacitance CO 0.5VDC	Impulse withstanding Voltage Capacity	Nominal Impulse Discharge Current
	@100V/S	@1KV/μs	1 GΩ	@1MHz (pF)	@10/700μs ±5 times	@8/20μs ±5 times
TPSMD4532-075NF	75V± 30%	600V	at 25V DC	≤0.6pF	4KV	2.0KA
TPSMD4532-090NF	90V± 30%	700V	at 50V DC	≤0.6pF	4KV	2.0KA
TPSMD4532-150NF	150V± 30%	700V	at 50V DC	≤0.6pF	4KV	2.0KA
TPSMD4532-200NF	200V± 30%	750V	at 100V DC	≤0.6pF	4KV	2.0KA
TPSMD4532-230NF	230V± 30%	750V	at 100V DC	≤0.6pF	4KV	2.0KA
TPSMD4532-300NF	300V± 30%	900V	at 100V DC	≤0.6pF	4KV	2.0KA
TPSMD4532-350NF	350V± 30%	900V	at 100V DC	≤0.6pF	4KV	2.0KA
TPSMD4532-400NF	400V± 30%	1000V	at 100V DC	≤0.6pF	4KV	2.0KA
TPSMD4532-470NF	470V± 30%	1000V	at 100V DC	≤0.6pF	4KV	2.0KA
TPSMD4532-600NF	600V± 30%	1200V	at 100V DC	≤0.6pF	4KV	1.0KA
TPSMD4532-800NF	800V± 30%	1600V	at 100V DC	≤0.6pF	4KV	1.0KA
TPSMD4532-1000NF	1000V± 30%	1800V	at 100V DC	≤0.6pF	4KV	1.0KA

Electrical Rating

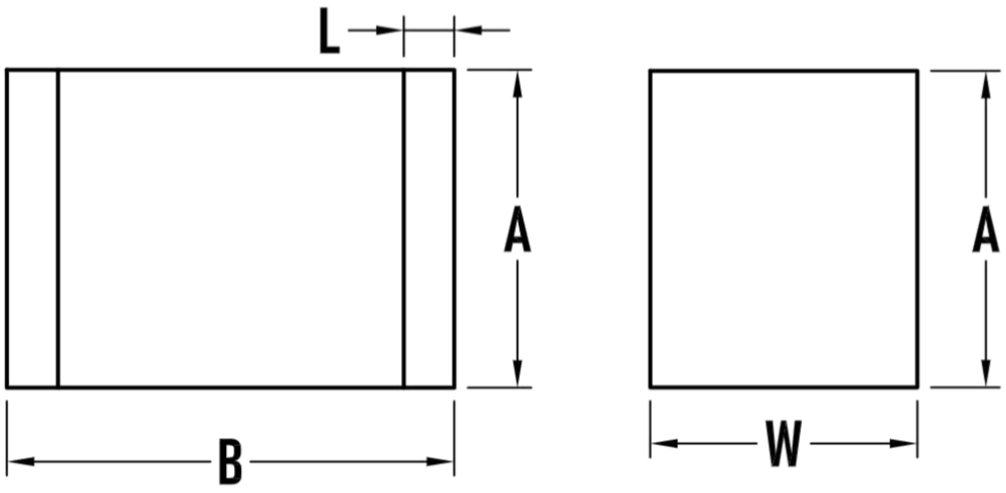
Item	Test Condition /Description	Requirement
DC Spark-over Voltage	The voltage is measured with a slowly rate of rise dv / dt=100V/s	To meet The specified value
Impulse Spark-over Voltage	The maximum impulse spark-over voltage is measured with a rise time of dv / dt=100V//μs or 1KV/μs	
Insulation Resistance	Theresistanceofgastubeshallbemeasuredeachterminaleachotherterminal,please see above spec.	
Capacitance	Thecapacitanceofgastubeshallbemeasuredeachterminaltoeachother terminal.Test frequency:1MHz	
NominalImpulse Discharge Current	The maximum current applying a aveformof8/20μsthatcanbeapplied across the terminals of the gas tube. One hour after the test is completed, re-testing of the DC spark-over voltage does not exceed±40% of the nominal DC spark-over voltage. Dwell time between pulses is 3minutes. 	

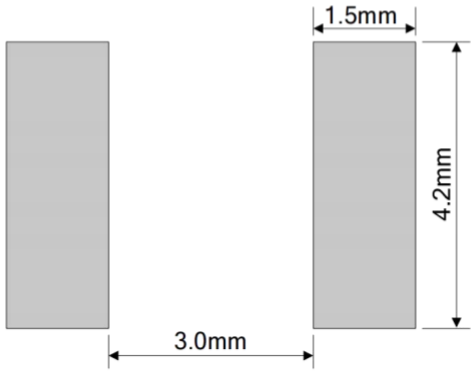
Cautions and warnings

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

Package Outline & Dimensions(Unit:mm)

4532(1812)



Dim.	Millimeters		
	MIN.	NOW.	MAX.
A	2.9	3.2	2.9
B	4.2	4.5	4.8
W	2.3	2.7	3.0
L	0.4	0.5	0.6

Suggested Land Pattern (Unit:mm)