Scope: This specification covers the series products of the tube type of Surge Absorber.

Part Number System :

WSG----2L----201----M----3167

1	2	3	4	5

1. WPMtek Series Name.

2. Straight in 2 pins

3. DC Spark-Over Voltage The first two digits are a multiplicand.
   The third number is 101.example : 201 means 20 X 10^1=200. (DC Spark-Over Voltage).

4. Tolerance of DC Spark-Over Voltage

L	M	N
±15%	±20%	±30%

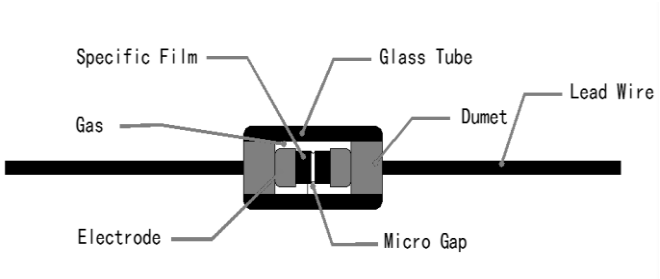
5. Glass Tube Dimension Ø3.1*6.7MM

Temperature range

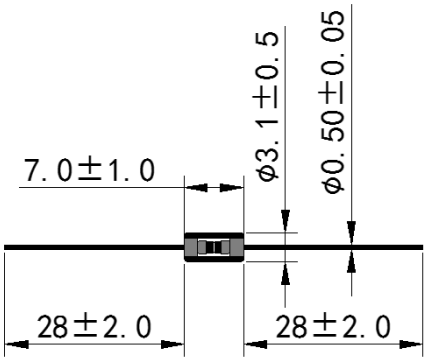
(1) Working temperature range: -45℃--------+125℃.

(2) Storaging temperature range: -45℃--------+125℃.

Structure



Dimension



SpecificationI

Part Number	DC Spark-Over Voltage Vs(V)	Insulation Resistance IR(OHM)/DCV	Electrostatic Capacitance 1KHz-6Vmax C(pF)	Surge current capacity 8/20μsec	Surge Life Test
WSG2L141M-3167	140(126~182)	>100M/50V	<1.0	2000A	1kHz-10KV ±100times 8/20μs 100A ±100times
WSG2L201M-3167	200(160-240)	>100M/100V			
WSG2L301M-3167	300(240-360)				
WSG2L401M-3167	400(320-480)	>100M/250V			
WSG2L501M-3167	500(400~600)				
WSG2L601M-3167	600(480-720)				
WSG2L701M-3167	700 (560-840)				
WSG2L801M-3167	800 (640-960)				
WSG2L102M-3167	1000(800-1200)	>100M/500V			
WSG2L122M-3167	1200(960-1440)				
WSG2L302M-3167	3000 (2400-3600)				1500AC/1min
WSG2L362M-3167	3600 (2880-4320)				1800AC/3Sec

(Color code)		1st Band	nd Band	3rd Band
(Black)	0	Part No.	Manufacture Lot No.1	Manufacture Lot No.2
(Brown)	1			
(Red)	2			
(Orange)	3			
(Yellow)	4			
(Green)	5	Orange	Red	White
(Blue)	6			
(Purple)	7			
(Gray)	8			
(White)	9			

Initial Characteristics.

Test Item	Test Method	Specification
DC Spark-Over VoltageVs(V)	Add and measure the DC Voltage gradually Max to get the discharge threshold voltage. The measuring current is 1mA/1 second max.	It depends on each spec.
Insulation Resistance	Measure the insulation resistance of two end of leadwire under the specified DC voltage.	100MΩ min.
Capacitance C(pF)	Measure the Electrostatic Capacitance under the test condition of 1KHz,DC 6V(max)	1pF max.

Enviromental Characteristics.

Test Item	Test Method	Characteristics
Cold Resistance JIS C0020	After -40±3℃(1000hrs) / room temp., normal humidity(4 hrs) cycle, measure the properties.	Within standard mentioned in Initial Characteristics.
Heat Resistance JIS C0021	After 125±2℃(1000hrs) / room temp., normal humidity(4 hrs) cycle, measure the properties.	Within standard mentioned in Initial Characteristics.
Humidity Resistance JIS C0020	After 85±2℃, 85% RH (1000hrs)/room temp., normal humidity(4hrs)cycle, measure the properties.	Within standard mentioned in Initial Characteristics.
Temperature Cycle Test (JIS C0025)	25 times repetition of cycle -40±3℃ (30 Min.),roon temp., (4 Min.), 125±2 ℃(30 Min.),room temp., normal humidity(4hrs) .	Within standard mentioned in Initial Characteristics.

Mechanical Characteristics.

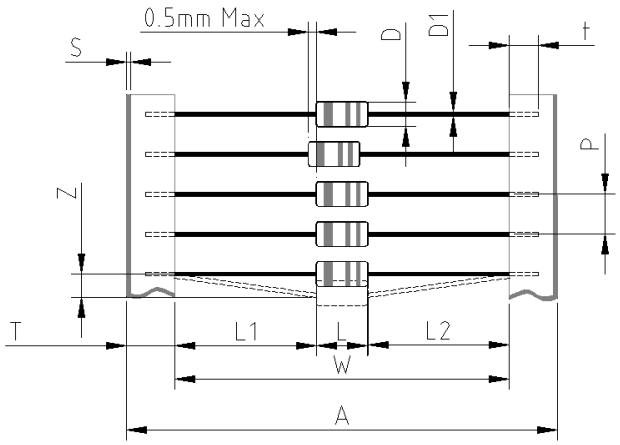
Test Item	Test Method	Characteristics
Pull Strength (JIS C0051)	Apply 2.5 kg load approximately 30 seconds, then check for pull-out and breaking of the lead wire.	Within standard mentioned in Initial Characteristics.
Flexure Strength (JIS C0051)	Bend the lead wire, with jig which radius is 0.75~0.8mm, at the point of 2mm from the body, under 0.25 kg load applied at the right angle the direction of the aims and get the bent lead wire back to its original poing after the procedure was repeated 2 times.)	Within standard mentioned in Initial Characteristics.

Solder Characteristics.

Test Item	Test Method	Specification
Solder ability (JIS C0050,4.6)	Apply flux and immerse in molten solder, up to the point of 3mm from the body,for 5 sec. (265℃±5℃). Wash the lead wire and check for soldering adhesion.	Lead wire is evenly covered by solder over 90%.
Solder Heat (JIS C0051)	(Lead wire is dipped up to the point of 2mm from the body, into 265℃±5℃ solder for 10±1 sec. And measure the properties.)	Within standard mentioned in Initial Characteristics.

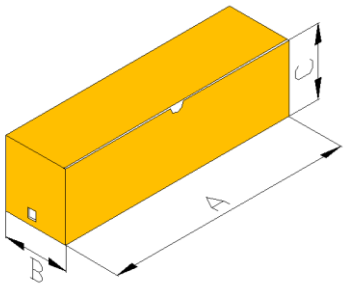
Surge Characteristics

Test Item	Test Method	Specification
Life	Apply a standard impulse voltage 10X700 μsec of 4KV for 5 times with intervals of 60 sec., and then change the polarity of the surge and apply a impulse again. And similarly, apply a impulse voltage 8X200 μsec of 100A. Total apply 200 times. Then measure DC spark-over voltage, IR & Capacitance.	DC spark-over voltage : Δ Vs/ Vs≦30%
Life	Apply 10 KV voltage charged in 1500pF condenser and apply the current to the specimen,200 times at 10 seconds of intervals.)	VS: △Vs/Vs≦30% IR: 100MΩ min. C: 1 Pf max



MARK	Dimension
A	65.5 max
W	52+0.5, -0.00
P	5.0 ± 0.5
T	6.0 ±1.0
Z	1.2 max
L1-L2	0.5 max
S	0.8 max
t	5.0 max
L	7.0±1.0
D1	Φ0.5±0.05
D	Φ3.1±0.30

PACKAGE inner box



MARK	(Dimension)
A (Length)	255mm
B (Width)	75mm
C (Height)	68mm
Q'ty	1500pcs

Carton:

MARK	(Dimension)
A (Length)	390mm
B (Width)	270mm
C (Height)	290mm
Q'ty	30000pcs