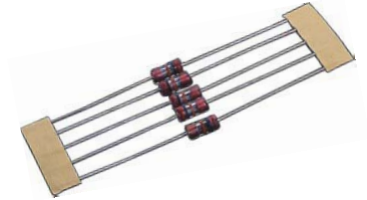


DATA SHEET

SPARK GAP – BK1 SERIES

FEATURE

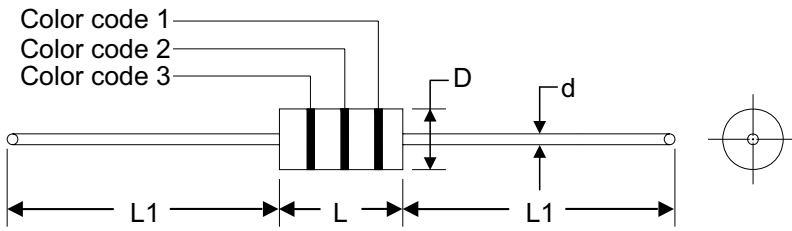
- ✧ Compared with other surge absorbers having similar functions BK series has the fast response speed ,largest withstand current and voltage but smallest size.
- ✧ Zero leaking current before clamping voltage.
- ✧ All electrical characteristics are very stable even after long period of charge and discharge. There is no need for inspection and exchange periodically.
- ✧ Super capability to withstand repeated lightning strikes.
- ✧ Stable and very Small electrostatic capacitance (<0.8pf) and great isolation (>100MΩ).
- ✧ No pollution material.
- ✧ Bilateral and symmetrical.
- ✧ Completely insensitive to weather, temperature, humidity and lightness.



APPLICATION

- ✧ For Power Supplies(BK1 or BK2 Series)
 - ◆ Standard power supplies requisite by US UL1449.
 - ◆ Highly reliable power supplies.
 - ◆ Three or two phases industrial or civic machinery equipment power.
 - ◆ Power supplies for IC or electronic circuits.
 - ◆ Surge compressor for switch and relay.
- ✧ For Data Communication Equipment(BK1,BK2 or BK3 Series)
 - ◆ Standard protection required by US UL497A and UL497B.
 - ◆ Programmable switch machine.
 - ◆ Telephone
 - ◆ Fax
 - ◆ Modem
- ✧ Equipment with Antenna or Antenna/Signal Circuits including mobile equipment(BK2 or BK3 Series)
 - ◆ Standard protection required by US UL1414.
 - ◆ Satellite Antenna
 - ◆ Amplifier
 - ◆ Cassette
 - ◆ Radio
 - ◆ Alarm and sensor
- ✧ Equipment where Anti-static is Required(BK2 or BK3 Series)
 - ◆ Display including TV.
 - ◆ Monitor
 - ◆ Environment where dusty and flammable material are presented.
- ✧ All kinds of Medical equipment and devices(BK1,BK2 or BK3 Series)

DIMENSION



Item	BK1 (mm)	Type
L	5.3±0.5	P
L1	28.0±3.0	-
D	Φ3.1±0.5	-
d	Φ0.5±0.05	-

ELECTRICAL CHARACTERISTICS

Part Number ①	Type ②	DC Spark-over Voltage	Minimum Insulation Resistance		Maximum Capacitance (1KHz-6V _{MAX})	Surge current capacity (8/20μs) ③	Surge Life Test
		Vs(V)	Test Voltage(V)	IR _{OHM} (MΩ)	C(pf)	8/20μs,100A	
BK1XX05002	P	1000	500	100	0.8	3000A	250 times
BK1XX07502	P	1500	500	100	0.8	3000A	250 times
BK1XX09002	P	1800	500	100	0.8	3000A	250 times
BK1XX10002	P	2000	500	100	0.8	3000A	250 times
BK1XX12002	P	2400	500	100	0.8	3000A	250 times
BK1XX13502	P	2700	500	100	0.8	3000A	250 times
BK1XX15002	P	3000	500	100	0.8	3000A	250 times
BK1XX18002	P	3600	500	100	0.8	3000A	250 times
BK1XX20002	P	4000	500	100	0.8	3000A	250 times
BK1XX22502	P	4500	500	100	0.8	3000A	250 times
BK1XX25002	P	5000	500	100	0.8	3000A	250 times

Note: ① Vs±XX%

② Please attention the type of the sheet if need or order.

③ Please see the test methods and results.

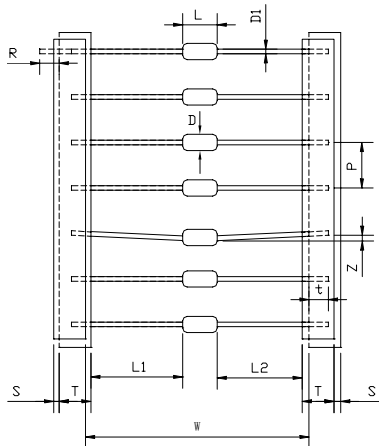
COLOR CODE

Part Number	Type	Color Code 1	Color Code 2	Color Code 3
BK1XX05002	P	Brown	Black	Red
BK1XX07502	P	Brown	Green	Red
BK1XX09002	P	Brown	Gray	Red
BK1XX10002	P	Red	Black	Red
BK1XX12002	P	Red	Yellow	Red
BK1XX13502	P	Red	Purple	Red
BK1XX15002	P	Orange	Black	Red
BK1XX18002	P	Orange	Blue	Red
BK1XX20002	P	Yellow	Black	Red
BK1XX22502	P	Yellow	Green	Red
BK1XX25002	P	Green	Black	Red

TEST METHODS AND RESULTS

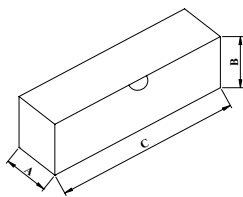
ITEM	TEST METHOD	STANDARD
Static Life	10KV with 1500pf condenser is discharged through 2KΩ resistor. 200 times at an interval of 10sec.	Rate-of-change, within $\pm 30\%$ insulation resistance & capacitance, conformed to rated spec.
Cold Resistance	Measurement after $-40^{\circ}\text{C}/1000$ HRS & normal temperature/2 HRS.	Features are conformed to rated spec.
Heat Resistance	Measurement after $125^{\circ}\text{C}/1000$ HRS & normal temperature/2 HRS.	
Humidity Resistance	Measurement after humidity $90\sim 95^{\circ}\text{C}(45^{\circ}\text{C})/1000$ HRS & normal temperature/2 HRS.	
Temperature Cycle	10 times repetition of cycle $-40^{\circ}\text{C}/30\text{min}$ → normal, temp/2 min → $125^{\circ}\text{C}/30\text{min}$, measurement after normal temp/2 HRS.	
Solder Ability	Apply flux and immerse in molten solder $230\pm 5^{\circ}\text{C}$ for 3sec up to the point of 1.5mm from body. Check for solder adhesion.	Lead wire is evenly covered by solder.
Solder Heat	Measurement after lead wire is dipped up to the point of 1.5mm from body into $260\pm 5^{\circ}\text{C}$ solder for 10sec.	Conformed to rated spec.
Pull Strength	Apply 0.5kg load for 10sec.	Lead shall not pull out to snap.
Flexural Strength	Bend lead wire at the point of 2mm from body under 0.25 load and back to its original point. Repeat 1 time.	
③ Surge Current Capacity	Approved if used together with a resistor or a varistor, electrically connected in series by means such as twist and soldering, staking, welding etc. Charge a $1.2/50\mu\text{s}$ & $8/20\mu\text{s}$, 3KA and apply it to be the sample. Do this 1 time.	No crack and no failures

AXIAL TAPING PACKAGING



Symbol	Dimension(mm)
W	52.0±1.5
P	5.0±0.5
L1-L2	1.0max.
T	6.0±1.0
Z	1.2max.
R	Terminals must not project from tape.
t	3.2max.
S	0.8max.
D	Φ3.6max.
D1	Φ0.5±0.05
L	5.8max.

INNER BOX DRAING



Symbol	Dimension(mm)	Quantity
A	78.0	1500PCS
B	78.0	
C	255.0	

LABEL



Notes:The "Label" on this document is for your format reference only. It is not connected to the actual model.

Notes

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