

# **DATA SHEET**

### SPARK GAP - BK2-M 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.
- $\diamond$  Stable and very Small electrostatic capacitance (<0.8pf) and great isolation (>100M $\Omega$ ).
- ♦ No pollution material.
- ♦ Bilateral and symmetrical.
- ♦ Completely insensitive to weather, temperature, humidity and lightness.

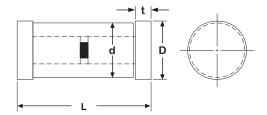
#### **APPLICATION**

- → 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	BK2-M
L	5.0±0.5
D	φ2.8±0.5
d	φ2.6±0.5
t	0.4±0.1

# **ELECTRICAL CHARACTERISTICS**

Part Number	DC Spark-over Voltage	Minimum Insulation Resistance		Maximum Capacitance (1KHz-6V <sub>MAX</sub> )	Surge current capacity
	Vs(V)	Test Voltage(V)	$IR_{OHM}(M\Omega)$	C(pf)	(8/20µs)
BK2XX00702-M	140	50	100	0.8	1000A
BK2XX01002-M	200	100	100	0.8	1000A
BK2XX01102-M	220	100	100	0.8	1000A
BK2XX01502-M	300	100	100	0.8	1000A
BK2XX02002-M	400	250	100	0.8	1000A
BK2XX02502-M	500	250	100	0.8	1000A
BK2XX03002-M	600	250	100	0.8	1000A
BK2XX03502-M	700	250	100	0.8	1000A
BK2XX05002-M	1000	500	100	0.8	1000A

Note: Vs±XX%

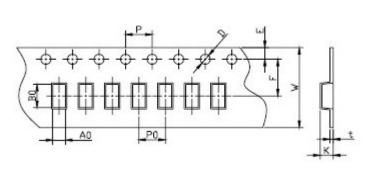
Revision:05-Dec-11 www.brightking.com



### **TEST METHODS AND RESULTS**

ITEM	TEST METHOD	STANDARD	
Static Life	10KV with 1500pf condenser is discharged through $2K\Omega$ resistor. 200 times at an interval of 10sec.	Rate-of-change, within ±30% insulation resistance & capacitance, conformed to rated spec.	
Cold Resistance	Measurement after -40°C/1000 HRS & normal temperature/2 HRS.		
Heat Resistance  Measurement after 125℃/1000 HRS & normal temperature/2 HRS.  Humidity Resistance  Measurement after humidity 90~95%(45℃)  /1000 HRS & normal temperature/2 HRS.		Features are conformed to rated spec.	
			Temperature Cycle
Solder Ability	Apply flux and immerse in molten solder $230\pm5^{\circ}$ 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 $260\pm5^{\circ}\text{C}$ solder for 10sec.		Conformed to rated spec.	

# PLASTIC CARRIER TAPING PACKAGING

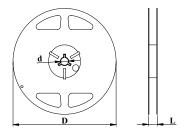


Symbol	Dimension(mm)
Р	4.0±0.1
P0	4.0±0.1
W	12.0±0.2
F	5.5±0.05
Е	1.5±0.1
D	Ф1.5±0.1
K	3.0±0.1
t	0.3±0.05
A0	3.0±0.1
В0	6.0±0.1

Revision:05-Dec-11 www.brightking.com



### **SMD REEL TAPING DRAWING**



Symbol	Dimension(mm)	Quantity
D	178.0	
d	13.0	1500PCS
L	15.0	

### **LABEL**







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

### **Notes**

©2011 Brightking, Inc.

We reserve the right to make changes without further notice to its products herein.

Please refer to our website for current information.

We make no warranty, representation or guarantee regarding the suitability of its products in customer's specific application.

Revision:05-Dec-11 www.brightking.com