



1. Introduction

Bencent gas-filled surge arresters are designed for protecting the telecommunication installations and power supply. The components are also used in switching equipments, CRT, CATV and household appliances.

2. Model Name

<u>B3D</u>	<u>XXX</u>	<u>L</u>
(1)	(2)	(3)

(1) Bencent $\Phi 5 \times 7.6$ Series 3-electrode surge arrester

(2) DC Breakdown Voltage (e.g., 90V, 150V, 230V, 350V, 420V etc.)

(3) Rating Surge Current (waveform 8/20 μ S):

L (5KA), M (10KA), H (20KA)

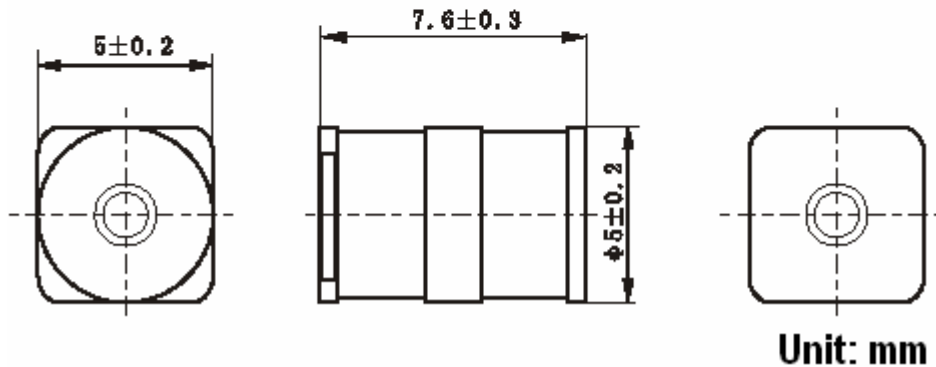
3. Features

- High Current Handling Capability
- Low Capacitance
- Fast Response
- Long Service Life
- Reliable Performance

4. Applications

- Telephone, FAX, Modem, MDF and PABX
- Power Supply (e.g.: UPS, power strip and power supply for base station in mobile telephone system)
- CRT (e.g., monitor and television)
- CATV (e.g., amplifier)
- Switching (e.g., negative ion generator, pulse igniting device, HID and motor drive circuit etc.)
- Household appliances (e.g., air conditioner)

5. Dimensions



6. Electrical Parameter (@T=25°C,RH=45%-75%)


Type ^①	DC Breakdown Voltage 100V/s	Tolerance of Vs	Impulse Spark-over Voltage 1kV/μs	Impulse Discharge Current 8/20μs ^②	Alternating Discharge current 50Hz ^③	Insulation Resistance		Co (10kHz @0.3V)
	V	%	V	KA	A	GΩ	DC	PF
B3D090L	90	25	≤700	5	5	≥1	25V	≤1.5
B3D150L	150	25	≤800	5	5	≥1	50V	≤1.5
B3D230L	230	25	≤800	5	5	≥1	100V	≤1.5
B3D350L	350	25	≤800	5	5	≥1	100V	≤1.5
B3D420L	420	25	≤900	5	5	≥1	100V	≤1.5

Notes:

- ① All the parameters are tested according to GB/T 9043-1999 and ITU-T K12
- ② Five times of each polarity, 3 minutes interval
- ③ Tested 5 Times, Discharge 1 second, 3 minutes interval



7. Marking

	Model Name	Type	Marking
Example	Φ5×7.6 3-electrod arrester	B3D090L	 0401 B3D090L

Notes :  0401
(1) (2)

B3D 090 L
(3) (4) (5)

(1) Trade Mark

(2) Date : 0401 stands for January, 2004

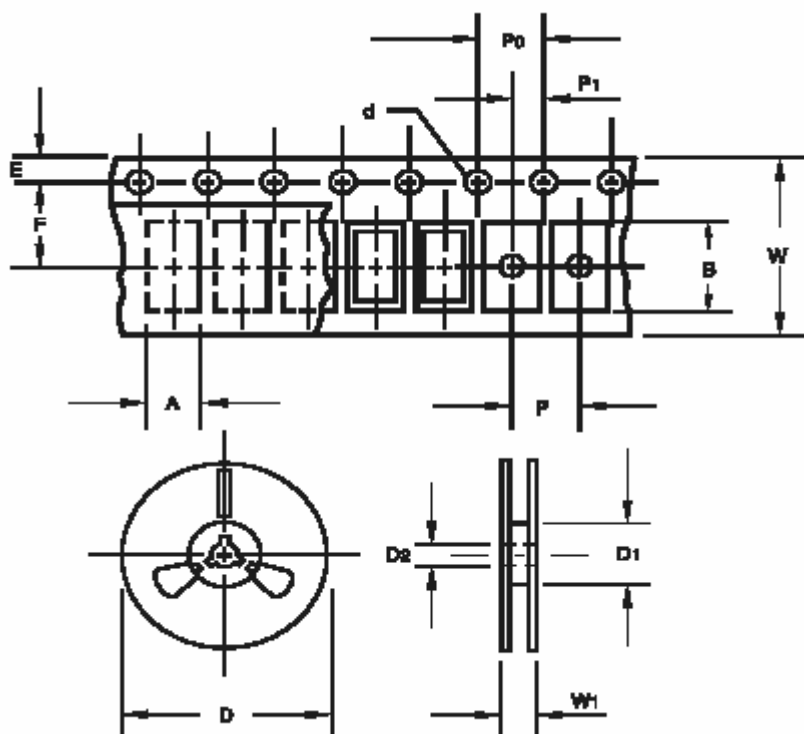
(3) B3D stands for Φ5×7.6 3-electrode

(4) DC Breakdown Voltage (e.g., 90V, 150V, 230V, 350V, 420V, etc.)

(5) Rating surge current (waveform 8/20μS) :

X (3KA) ; L(5KA) ; M(10KA) ; H (20KA)

8. Package



Mark	Dimension: mm(inch)
A	5.5 +/- 0.2 (.217 +/- .008)
B	8.5 +/- 0.2 (.335 +/- .008)
d	1.50 +/- 0.05 (.059 +/- .002)
D	180+0/- 1.5 (7.087 +/- .059)
D1	50 Min.(1.969Min.)
D2	13 +/-0.5 (.512 +/- .020)
E	1.75 +/- 0.1 (.069 +/- .004)
F	5.5 +/- 0.05 (.217 +/- .002)
P	8.0 +/- 0.1 (.315 +/- .004)
P0	4.0 +/- 0.1 (.157 +/- .004)
P1	2.0 +/- 0.1 (.079 +/- .004)
W	16.0 +/- 0.3 (.629 +/- .012)
W1	20.0 +/- 1.0 (.787 +/- .039)

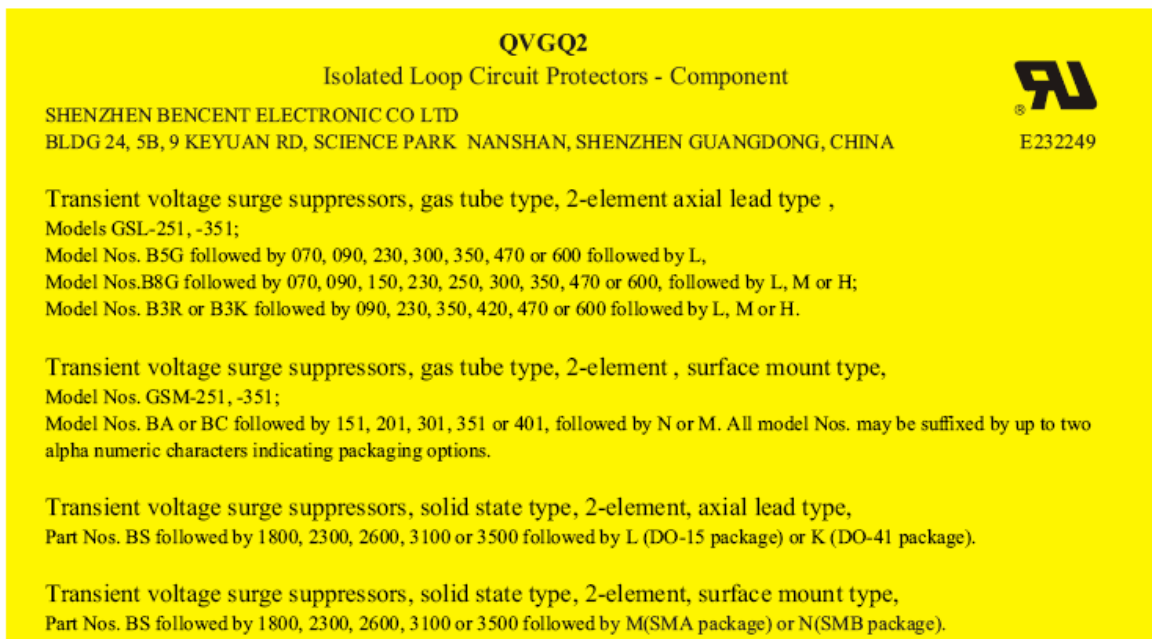
PACKAGE		QTY PER REEL/BOX (PCS)	QTY PER CARTON (PCS)	CARTON SIZE(mm)		
				L	W	H
B3D SERIES	BULK	100	6,000	390	370	220
	TAPING	400	12,000	390	370	220

9. CERTIFICATE


Certificate of ISO9001 (BSI)



Certificate of UL



[Http://www.ul.com](http://www.ul.com)



Test Report No.: GZ0603037056/CHEM Date: APR 06, 2006 Page 1 of 2

SHENZHEN BENCENT ELECTRONICS CO., LTD
2F, BUILDING 1, PINGSHAN MINQI SCIENCE & TECHNOLOGY PARK, XILI, NANSHAN SHENZHEN, CHINA

Report on the submitted sample said to be 陶瓷气体放电管


SGS Ref No : SZ060311221RC
Sample Receiving Date : MAR 22, 2006
Further Sample Receiving Date : MAR 28, 2006
Testing Period : MAR 22, 2006 TO APR 04, 2006

Test Requested : (1) As specified by client, Sample 1&2: to determine the Lead, Cadmium, Mercury & Hexavalent Chromium content in the submitted sample.
(2) Sample 1: Determination of PBBs (Polybrominated Biphenyls), PBDEs (Polybrominated Diphenylethers) of the submitted sample.

Test Method : (1) Lead content - With reference to EPA method 3050B: 1996 / other acid digestion.
Cadmium content - With reference to BS EN1122: 2001 method B / other acid digestion.
Mercury content - With reference to EPA 3052: 1996 / other acid digestion.
Hexavalent Chromium content - With reference to EPA 3060A : 1996 & EPA 7196A : 1992.
Analysis was performed by Atomic Absorption Spectrometer / Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES) / UV-VIS Spectrophotometer.
(2) With reference to EPA 3540C / 3550C. Analysis was performed by GC/MS.

Results : Please refer to next page.

Signed for and on behalf of
SGS-CSTC Ltd.


Zhang Li, Amy
Sr. Engineer

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or attached. Said Conditions are also available upon request or are accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30 days only. This Test Report shall not be reproduced except in full, without written approval of the Company.

GZCM 545152

SGS-CSTC Standards Technical Service Co., Ltd 198 WEIHU Road, SCENTECH Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510662 t (86-20)82155555 f (86-20)82075113 www.cn.sgs.com
Guangzhou Analytical Laboratory 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510662 t (86-20)82155555 f (86-20)82075113 e sgs.china@sgs.com

Member of SGS Group (Société Générale de Surveillance)


Test Report

No.: GZ0603037056/CHEM

Date: APR 06, 2006

Page 2 of 2

Results :

(1)

Item	Unit	MDL	No.1	No.2
Lead Content (Pb)	ppm	2	N.D.	15
Cadmium Content (Cd)	ppm	2	N.D.	N.D.
Mercury Content (Hg)	ppm	2	N.D.	N.D.
Hexavalent Chromium Content [Cr(VI)]	ppm	2	N.D.	N.D.

Note : - N.D. = Not Detected (< MDL)
 - MDL = Method Detection Limit
 - ppm = mg/kg

(2)

	No.1
Flame Retardants	
Polybrominated Biphenyls (PBBs)	
Monobromobiphenyl	N.D.
Dibromobiphenyl	N.D.
Tribromobiphenyl	N.D.
Tetrabromobiphenyl	N.D.
Pentabromobiphenyl	N.D.
Hexabromobiphenyl	N.D.
Heptabromobiphenyl	N.D.
Octabromobiphenyl	N.D.
Nonabromodiphenyl	N.D.
Decabromodiphenyl	N.D.
Polybrominated Diphenylethers (PBDEs)	
Monobromodiphenyl ether	N.D.
Dibromodiphenyl ether	N.D.
Tribromodiphenyl ether	N.D.
Tetrabromodiphenyl ether	N.D.
Pentabromodiphenyl ether	N.D.
Hexabromodiphenyl ether	N.D.
Heptabromodiphenyl ether	N.D.
Octabromodiphenyl ether	N.D.
Nonabromodiphenyl ether	N.D.
Decabromodiphenyl ether	N.D.

Note : - N.D. = Not Detected (< 5 ppm)
 - ppm = mg/kg

Specimen Description:

No.1 White ceramic w/ blue printing
 No.2 Silvery / Coppery metal end w/ silvery metal pin

*** End of Report ***

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or attached. Said Conditions are also available upon request or are accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30 days. This Test Report shall not be reproduced except in full, without written approval of the Company.


 SGS (China) Technical Service Co., Ltd.
 Guangzhou Laboratory

 198 WEDU Road, SCIENTECH Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663
 中国 - 广州 - 经济技术开发区科学城科珠路198号 邮编: 510663

GZCM 545151

Member of SGS Group (Société Générale de Surveillance)