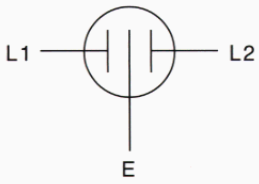
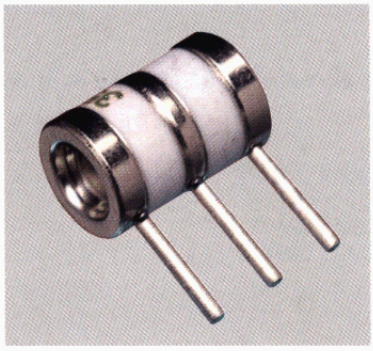
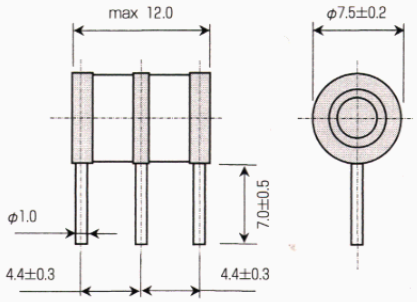
3YVJ Series (Three Electrode)

3J Series (UL Approved)

Symbol



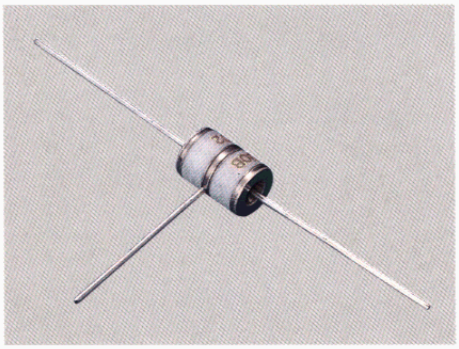


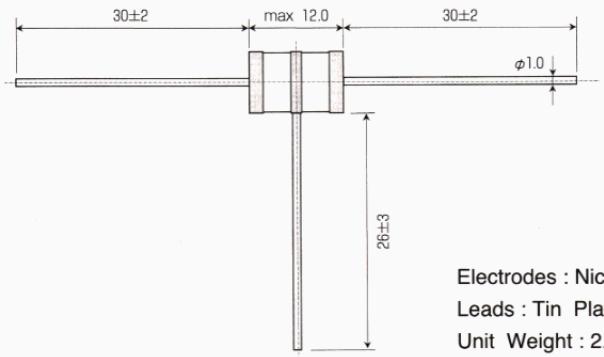


Model J1 *Fig.1*

Electrodes : Nickel Plated
Leads : Tin Plated
Unit Weight : 2.8g

Units : mm





Model B *Fig.2*

Electrodes : Nickel Plated
Leads : Tin Plated
Unit Weight : 2.8g

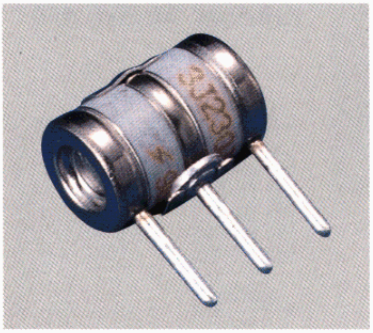
Units : mm

Part Number	Standard Part Number	Lead configuration : **J1**	See Fig. 1	With Fail-Safe (See Note 4)	**3YVJ-90J1**	**3YVJ-145J1**
		Fail-Safe Model : **J1F2**	See Fig. 3		**3YVJ-90J1F2**	**3YVJ-145J1F2**
		Lead configuration : **B**	See Fig. 2		**3YVJ-90B**	**3YVJ-145B**
	UL Approved Part Number (See Note 3)	Lead configuration : **B**	See Fig. 2		**3J-1B**	**3J-2B**
		Lead configuration : **J1**	See Fig. 1		**3J-1J1**	**3J-2J1**

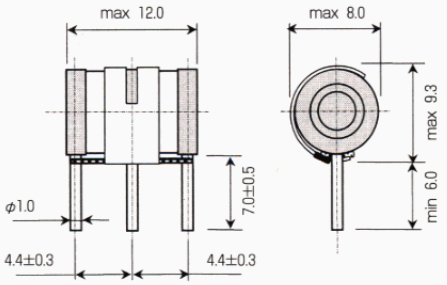
DC Sparkover Voltage (L1-E)(L2-E)	100V/s		90V±20%	145V±20%
Impulse Sparkover Voltage (L1-E)(L2-E)	100V/μs		≤ 700V	≤ 700V
	1kV/μs		≤ 850V	≤ 850V
Insulation Resistance	See Note1		≥ 10,000MΩ	≥ 10,000MΩ
Capacitance	1MHz		≤ 3.0pF	≤ 3.0pF
DC Holdover Voltage	See Note 2		≤ 52V	≤ 52V
Impulse Life (L1+L2-E)	10/1000μs, 400A		300 times	300 times
Impulse Discharge Current, 8/20μs (L1+L2-E)	Single		20kA	20kA
	Repeat 10 times (5 times each polarity)		10kA	10kA
AC Discharge Current, 50Hz (L1+L2-E)	Single (9 Cycles)		130A	130A
	Repeat 10 times (1 second)		10A	10A

3YVJ Series (Three Electrode)

3J Series (UL Approved)



Fail-Safe Model J1F2 *Fig.3*



Electrodes : Nickel Plated
Leads : Tin Plated
Unit Weight : 2.8g

Units : mm

Note :

1. Insulation Resistance shall be measured with the following voltages for each nominal DC Sparkover Voltage.

Nominal DC Sparkover Voltage	Measuring Voltage
90V～145V	DC 50V
200～550V	DC 100V

2. DC Holdover Voltage shall be measured in accordance with the ITU-T K.12, Test Circuit or the IEEE C62.31 1987 Test Circuit.
3. Recognized under UL497B, File Number E14096.
4. Fail-Safe Operation Time : at 25℃ for Fail-Safe Model F2
   (Other Fail-Safe models are available)

L1+L2-E		
1A+1A :	≤	15 sec
3A+3A :	≤	10 sec
5A+5A :	≤	7 sec
10A+10A :	≤	5 sec

5. Measured with impulse waveform : 10/1000μs, 1000A
6. Lead spacings(pitch) of 4.7 mm and 5.0 mm are available by request.

	3YVJ-230J1		3YVJ-260J1	3YVJ-300J1	3YVJ-350J1	3YVJ-400J1	3YVJ-550J1
3YVJ-200J1F2	3YVJ-230J1F2	3YVJ-250J1F2	3YVJ-260J1F2	3YVJ-300J1F2	3YVJ-350J1F2	3YVJ-400J1F2	3YVJ-550J1F2
	3YVJ-230B	3YVJ-250B	3YVJ-260B	3YVJ-300B	3YVJ-350B	3YVJ-400B	
	3J-3B	3J-4B		3J-5B	3J-6B	3J-7B	
	3J-3J1	3J-4J1		3J-5J1	3J-6J1	3J-7J1	
200V±25%	230V±20%	250V±20%	260V±20%	300V±20%	350V±20%	400V±20%	550V±20%
≤ 500V	≤ 500V	≤ 500V	≤ 500V	≤ 600V	≤ 600V	≤ 700V	≤ 850V
≤ 650V	≤ 650V	≤ 650V	≤ 650V	≤ 750V	≤ 750V	≤ 850V	≤ 1,000V
≥ 10,000MΩ	≥ 10,000MΩ	≥ 10,000MΩ	≥ 10,000MΩ	≥ 10,000MΩ	≥ 10,000MΩ	≥ 10,000MΩ	≥ 10,000MΩ
≤ 3.0pF	≤ 3.0pF	≤ 3.0pF	≤ 3.0pF	≤ 3.0pF	≤ 3.0pF	≤ 3.0pF	≤ 3.0pF
≤ 135V	≤ 135V	≤ 135V	≤ 135V	≤ 135V	≤ 150V	≤ 150V	≤ 150V
300 times	300 times	300 times	300 times	300 times	300 times	400 times (See Note 5)	300 times
20kA	20kA	20kA	20kA	20kA	20kA	20kA	20kA
10kA	10kA	10kA	10kA	10kA	10kA	10kA	10kA
130A	130A	130A	130A	130A	130A	130A	130A
10A	10A	10A	10A	10A	10A	10A	10A

3YVH Series (Three Electrode)

Symbol

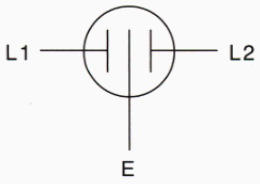
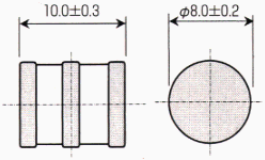


Fig.1

Model A

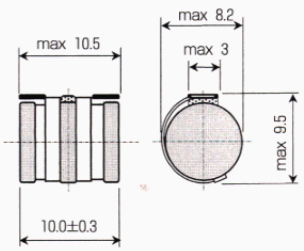


Electrodes : Nickel Plated
Unit Weight : 2.45g

Units : mm

Fig.2

Fail-Safe Model AF5



Electrodes : Nickel Plated
Unit Weight : 2.6g

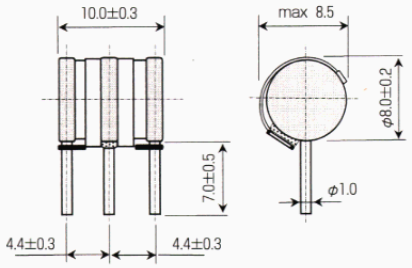
Units : mm

Fig.3

Fail-Safe Model J1F5

Electrodes : Nickel Plated
Leads : Nickel Plated
Unit Weight : 2.75g

Units : mm



Note :

1. DC Holdover Voltage measurement shall comply with ITU-T K.12, Test #3 for 3YVH-230 & 3YVH-250, and Test #2 for 3YVH-350.
2. Fail-Safe Operation Time : 10 sec at AC 10A(5A+5A=L1+L2)
3. Measured Impulse : 100A(5A+5A=L1+L2)
   - A. After Impulse Life, Impulse & AC Discharge Current Test
     DC Sparkover Voltage : 180～300V
     Impulse Sparkover Voltage : ≤ 900V
     Insulation Resistance : ≥ 100MΩ
   - B. After Impulse Life, Impulse & AC Discharge Current Test
     DC Sparkover Voltage : 250V±50%
     Impulse Sparkover Voltage : ≤ 900V
     Insulation Resistance : ≥ 100MΩ
   - C. After Impulse Life, Impulse & AC Discharge Current Test
     DC Sparkover Voltage : 250～450V
     Impulse Sparkover Voltage : ≤ 900V
     Insulation Resistance : ≥ 100MΩ

Part Number			3YVH-230A	3YVH-250A	3YVH-350A
	Model **A** : Without leads	See Fig. 1	**3YVH-230A**	**3YVH-250A**	**3YVH-350A**
	Model **AF5** : With Fail-Safe (See Note 2)	See Fig. 2	**3YVH-230AF5**	**3YVH-250AF5**	**3YVH-350AF5**
	Model **J1F5** : With leads and Fail-Safe	See Fig. 3	**3YVH-230J1F5**		

DC Sparkover Voltage (L1-E)(L2-E)	100V/s	180 - 300V	200 - 300V	280 - 420V
Impulse Sparkover Voltage (L1-E)(L2-E)	1kV/μs	≤ 900V	≤ 900V	≤ 900V
Insulation Resistance	100V DC	≥ 1,000MΩ	≥ 1,000MΩ	≥ 1,000MΩ
Capacitance	1MHz	≤ 3.0pF	≤ 3.0pF	≤ 3.0pF
DC Holdover Voltage	See Note 1	≤135V	≤135V	≤ 80V
Impulse Life (L1+L2-E)	10/1000μs 200A	300 times See Note 3A	300 times See Note 3B	300 times See Note 3C
Impulse Discharge Current, 8/20μs (L1+L2-E)	Repeat 10 times (5 times, each polarity)	Not specified	Not specified	20kA See Note 3C
AC Discharge Current, 50Hz (L1+L2-E)	Repeat 5 times 1 sec.	10A See Note 3A	20A See Note 3B	20A See Note 3C