



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

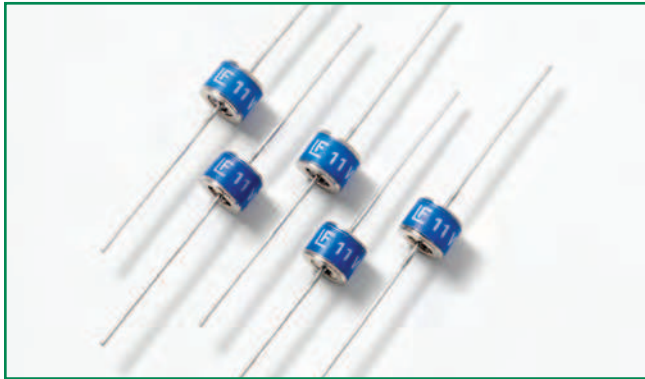
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



### RoHS VIS Series



#### Schematic Symbol



#### Device Series Ratings:

<b>Max Load Current</b>	50 mA
<b>Max Switching Frequency</b>	25Hz - VIS 230 200Hz - VIS 400 to VIS 800
<b>Operating Temperature T<sub>OP</sub></b>	-20°C to +125°C
<b>Storage Temperature T<sub>STG</sub></b>	-40°C to +90°C
<b>Insulation Resistance</b>	100 MΩ
<b>Capacitance</b>	1.5 pF

#### Description

The VIS series is a two-terminal, bi-directional, voltage triggered switch, specifically for ignition circuits used in high pressure HID lighting. The gas plasma trigger technology offers very fast switch speeds with improved di/dt values compared to similar function silicon based devices. Switching voltages are fixed depending on the part number selected.

#### Features

- RoHS compliant
- Ceramic chamber for ultimate reliability.
- Very high switch speed when switch voltage achieved. High di/dt
- allows for optimum performance of ignition transformers.
- Tape and reel to EIA 481-1

#### Applications

- Switching stored electrical energy (such as capacitive discharge) at predetermined voltages.
- In gas/fuel ignition systems and similar circuits

#### Device Specifications

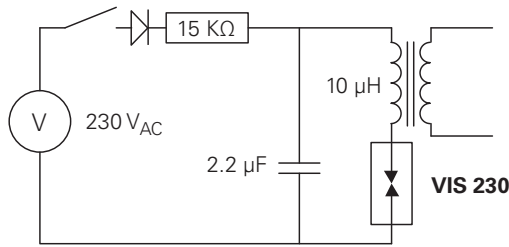
Part Number	Discharge Peak Current	Switching Operations <sup>1</sup> (Electrical Life)	Initial Break Down Voltage <sup>2</sup>	Initial Voltage, First Ignition Value <sup>2</sup>	Electrical Life Breakdown Voltage Values	Electrical Life First Ignition Values <sup>3</sup>
	Amps	# of cycles typ	Volts	Volts	Volts	Volts
VIS 230	300	2,000,000	200-255	280	200-280	280
VIS 400	500	100,000	350-460	460	340-460	500
VIS 600	1000	30,000	528-627	720	510-690	750
VIS 800	400	200,000	704-896	950	680-920	1000

#### Notes:

1. Number of switching operations depends on peak surge current, operating frequency and ambient temperature. Refer to "Electrical Life Time - Test Circuits" section of this data sheet for additional details.
2. Measured at 100 volts per second.
3. Measured after 24 hours of darkness.

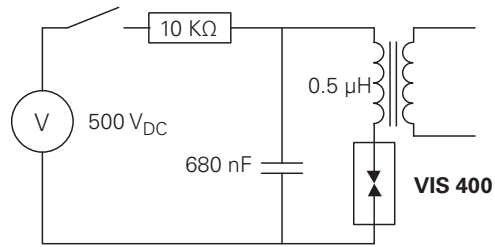
### Electrical Life Time - Test Circuits

**VIS 230 Life Test Circuit**



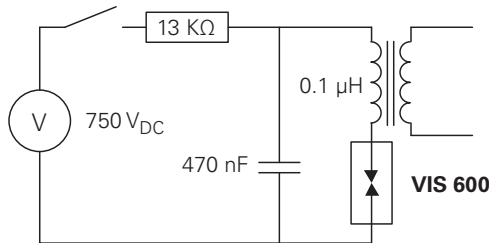
2,000,000 operations  
10 - 25Hz  
Testing Temperature 25°C

**VIS 400 Life Test Circuit**



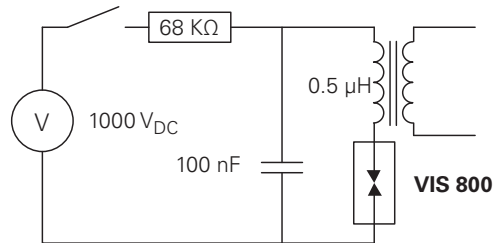
100,000 operations  
1 sec. on, 10 sec. off  
Testing Temperature 25°C

**VIS 600 Life Test Circuit**



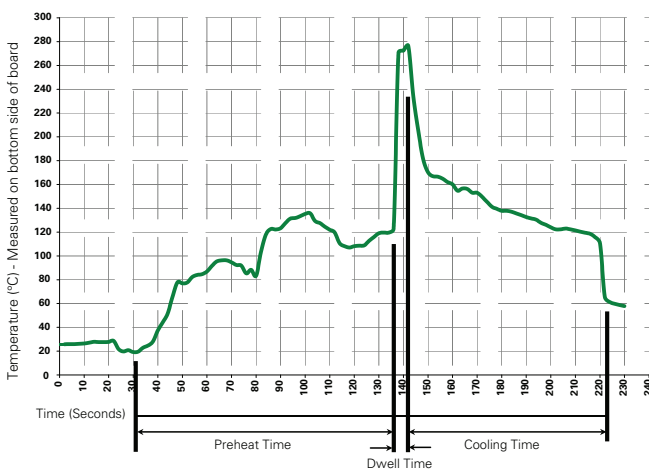
30,000 operations  
1 sec. on, 10 sec. off  
Testing Temperature 25°C

**VIS 800 Life Test Circuit**



200,000 operations  
1 sec. on, 10 sec. off  
Testing Temperature 25°C

### Soldering Parameters - Wave Soldering (Thru-Hole Devices)



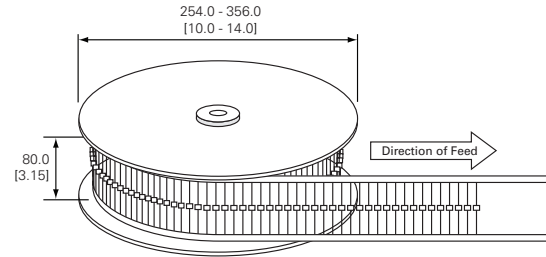
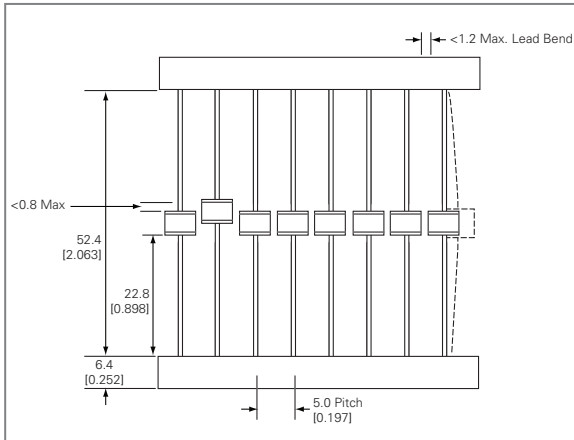
### Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
<b>Preheat:</b> (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100° C
Temperature Maximum:	150° C
Preheat Time:	60-180 seconds
<b>Solder Pot Temperature:</b>	280° C Maximum
<b>Solder Dwell Time:</b>	2-5 seconds

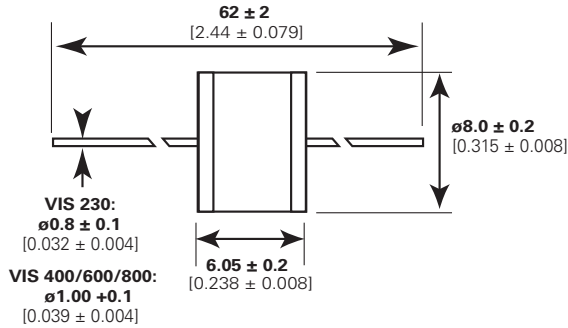
### Soldering Parameters - Hand Soldering

Solder Iron Temperature: 350° C +/- 5°C  
Heating Time: 5 seconds max.

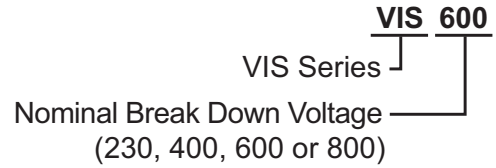
### Packaging Dimensions



### Dimensions in mm (inch)



### Part Numbering System



### Mechanical Specifications:

<b>Material and Plating</b>	Device Body: Ceramic Insulator Construction Device Plating: Nickel @ 2-5 microns Wire Plating: Tin @ 17.5 +/- 12.5 microns
<b>Device Marking</b>	Littelfuse 'LF' marking, voltage and date code; Blue ink with negative print