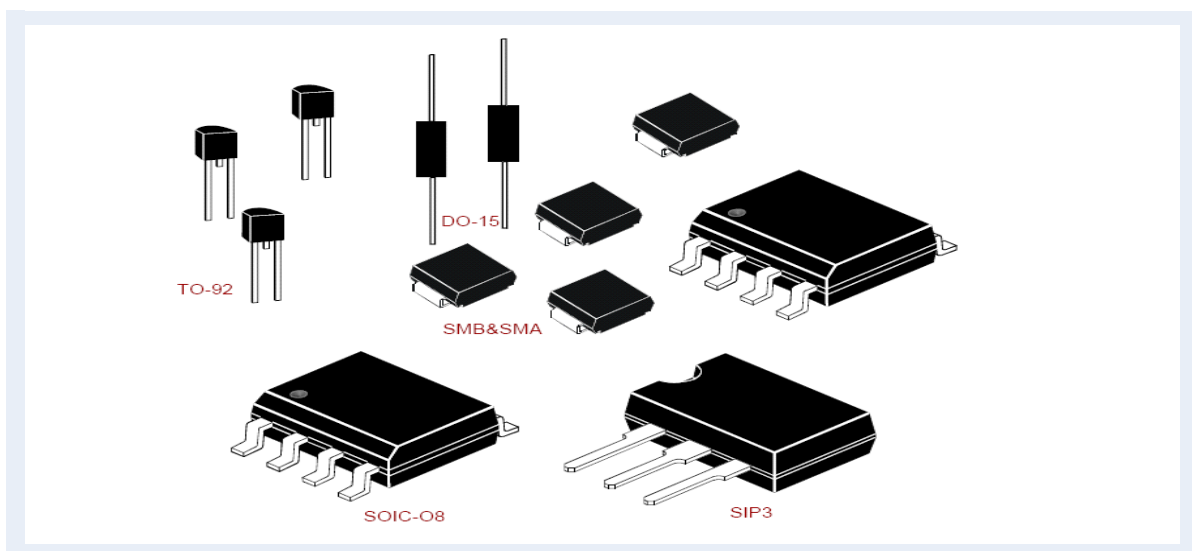


Thyristor Surge Suppressor

TSS is a type of switched protection device which is paralleled with circuit. When abnormal surge is up to break-down voltage, the device become low resistance from high, instantly absorbing the surge current, because of the negative resistance effect, the TSS's two-terminal voltage can below 4V;when abnormal surge dissipation, TSS recover the high resistance.

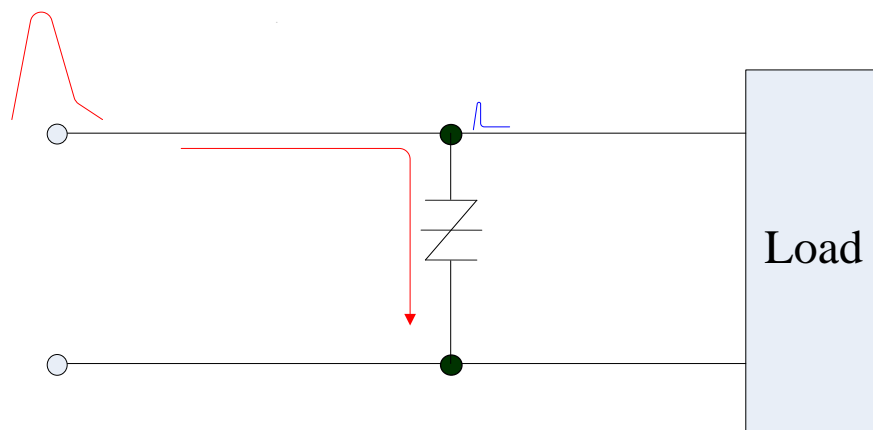


Features:

- A type of switched protection device specially used to protect the telecommunication signal circuit
- Consist of discrete and array devices
- Fast response time : less than 1ns
- Voltage specification including: 6/8、25/30、58V/64、65V/72、75V/90、90V/110、120V/130、140V/150、170V/180、190V/230、220V/260、275V/310、320V/350
- Precise break-down voltage
- Capacitance value is scores of pF , AA stands for low capacitance
- Low leakage current, is uA level
- Various package , SMA、SMB、TO-92、DO-15、DO-27 SOIC-08 and so on realize the flexible solution in different site and space
- AA/TA series stand for SMA, SA/SB/SC series stand for SMB, L series stand for DO-15/DO-27 ,and E stand for TO-92

Brightking offer 10/1000uS 150A、200A series products to meet higher surge protection requirements;For the application of super higher frequency data signal circuit , the products' capacitance below to 25PF、16PF、10PF can meet the requirements

TSS schematic diagram as below:



TSS is widely used to protect semiconductor and sensitive devices. TSS can protect the surge of telecommunication signal circuit to keep the inner IC away from the damage caused by instantly over-voltage.

Applications:

- Data cable protection
- RS232/RS422/RS485 interface card
- xDSL and ISDN、HDS transportation device
- CPE device , such as: mobile phone、modem
- Central office line cards
- T1/E1
- PBX and other exchange device

Brightking's TSS products are RoHS and WEEE compliant, can meet the following

standards and certifications : UL60950 、 GR1089 、 ITU K21 、 IEC61000-4-5 、 IEC61643-341、 GB/T8802.341

TSS selection principle:

ELECTRICAL PARAMETERS

Part Number	V _{DRM} Volts	V _s Volts	V _T Volts	I _{DRM} μAmps	I _s mAmps	I _T Amps	I _H mAmps	C _o pF
P0080AA	6	25	4	5	800	2.2	50	30
P0300AA	25	40	4	5	800	2.2	50	30

V _{DRM}	Reverse stand-off or working voltage	V _s	Switching voltage
I _{DRM}	Reverse maximum leakage current	I _T	On-state current
V _T	On-state voltage	C _{type}	Typical capacitance
I _H	Holding current	I _s	Switching current

- V_{drm} must be no less than maximum working voltage of the protected circuit
- Switching voltage(V_s) must be less than maximum transient peak voltage the protected equipment can withstand
- I_H: Holding current must greater than working current and short circuiting current
- C: capacitance according to insert wastage or signal transportation frequency
- Surge current selected by circuit or surge test standard requirement