

Transient Voltage Suppressors

Surgeclamps

Surgeclamp Types

Type No.	Function	V _Z min. V	V _{BO} max. (100V /μs) V	I _{TSM} (1 x 2 μs) A	I _H mA/	Pkg. Style
SGT10S10	Var Clamp	100	*	300	> 100	A
SGT27S10	Var Clamp	270	*	300	> 100	A
SGT03U13	Uni-Direct	30	< 50	300	> 130	B
SGT06U13	Uni-Direct	60	< 85	300	> 130	B
SGT23U13	Uni-Direct	230	< 275	300	> 130	B
SGT23B13	Bi-Direct	230	< 275	300	> 130	B
SGT27B13	Bi-Direct	270	< 340	300	> 130	B
SGT27B27	Bi-Direct	270	< 350	600	> 270	B

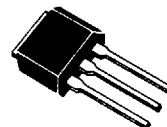
* Dependent on trigger circuit

Surgeclamp Characteristics

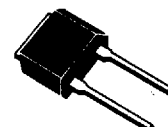
- High impedance until breakdown (i.e., low leakage)
- Repeatable breakdown/threshold voltage
- High surge-current handling capability
- Withstand and respond to rapidly recurring surges
- Fast recovery to high-impedance state (turn-off)
- Dual-polarity protection
- No degradation of essential characteristics with use

Surgeclamp Packages

Modified TO-202 Package Style



Package A



Package B

Metal-Oxide Varistors (MOVs)

<p>CH</p>	<p>RA</p>	<p>CP</p>	<p>LA</p>
<p>ZA</p>	<p>MA</p>	<p>PA</p>	<p>DA</p>
<p>DB</p>	<p>BA, BB</p>	<p>CA</p>	

Family Characteristics

Series	CH	RA	CP	LA, ZA	MA	PA	DA/DB, HE	BA, BB	CA
Operating Ambient Temp. (w/out derating)	-55 to +125°C	-55 to +125°C	-55 to +125°C	-55 to +85°C	-55 to +85°C	-55 to +85°C	-55 to +85°C	-55 to +85°C	-55 to +85°C
Storage Temperature	-55 to +150°C	-55 to +150°C	-55 to +150°C	-55 to +125°C	-55 to +125°C	-55 to +125°C	-55 to +125°C	-55 to +125°C	-55 to +125°C
† HiPot Encapsulation Volts dc for 1 Min.	NA	2500	NA	2500	1000	NA	5000	5000	NA
Voltage Temp. Coefficient (V _C at Specified Test Current)	<0.01%/°C	<0.01%/°C	<0.01%/°C	<0.01%/°C	<0.01%/°C	<0.01%/°C	<0.01%/°C	<0.01%/°C	<0.01%/°C
Insulation Resistance (MΩ)	NA	>1000	NA	>1000	>1000	NA	>1000	>1000	NA

† Dielectric withstand per MIL STD 202, Method 301, 2500 V_{DC} min