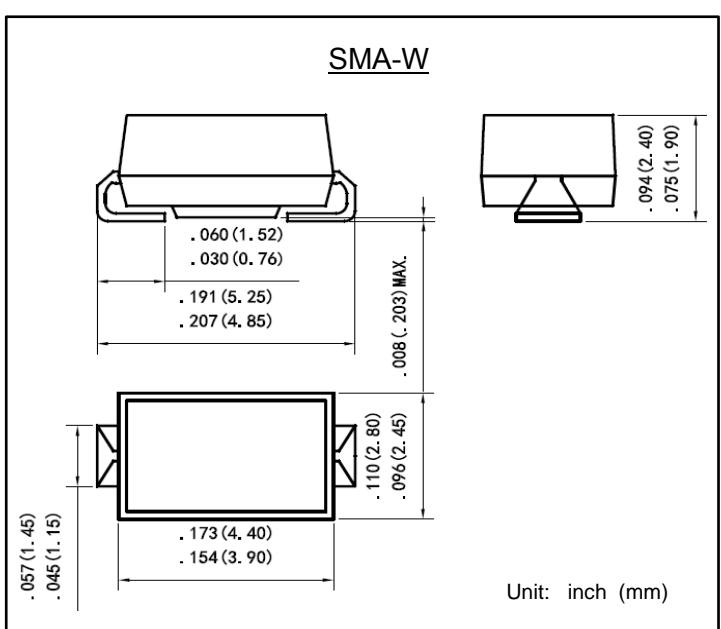


## Surface Monument High Voltage Bidirectional Trigger Diode Breakdown Reverse Voltage 70 ~ 220 V



### Features

- Low reverse leakage
- High reliability
- High temperature soldering guaranteed: 260°C/10seconds on terminals
- Lead and body according with RoHS standard
- Bidirectional crowbar protection
- High forward surge current capability
- Will not fatigueThe plastic package carries Underwriters Laboratory, Flammability Classification 94V-0
- Eliminate voltage overshoot caused by fast-rising transients
- Cannot be damaged by voltage

### Mechanical Data

- Case: JEDEC SMA-W Molded plastic
- Lead: Pure tin plated, lead free
- Mounting Position : Any

### Electrical Parameters

Part Number	Marking	V <sub>DRM</sub> (V)	V <sub>BO</sub> (V)			V <sub>T</sub> (V)	I <sub>T</sub> (A)	I <sub>BO</sub> (V)	I <sub>DRM</sub> (V)	I <sub>H</sub> (mA)
			Min.	Typ.	Max.					
K090SAW	K090	70	79	93	97	4.0	1.0	500	1.0	50
K105SAW	K105	90	95	105	110	4.0	1.0	500	1.0	50
K110SAW	K110	95	104	110	118	4.0	1.0	500	1.0	50
K120SAW	K120	100	110	122	125	4.0	1.0	500	1.0	50
K130SAW	K130	110	120	135	138	4.0	1.0	500	1.0	50
K140SAW	K140	120	130	140	146	4.0	1.0	500	1.0	50
K150SAW	K150	125	135	155	160	4.0	1.0	500	1.0	50
K160SAW	K160	130	140	163	170	4.0	1.0	500	1.0	50
K180SAW	K180	180	165	180	195	4.0	1.0	500	1.0	50
K200SAW	K200	180	190	205	215	4.0	1.0	500	1.0	50
K220SAW	K220	190	205	220	230	4.0	1.0	500	1.0	50
K240SAW	K240	200	220	240	250	4.0	1.0	500	1.0	50
K260SAW	K260	220	240	260	280	4.0	1.0	500	1.0	50

Note:

1) All measurements are made at an ambient temperature of 25°C.

### Thermal Considerations

Package	Symbol	Parameter	Value	Unit
SMA-W	T <sub>J</sub>	Operating Junction Temperature	125	°C
	T <sub>S</sub>	Storage Temperature Range	-40 to +125	°C
	R <sub>θJA</sub>	Junction to Ambient on printed circuit	85	°C/W

## Characteristics Curves

Figure 1. V-I Characteristics

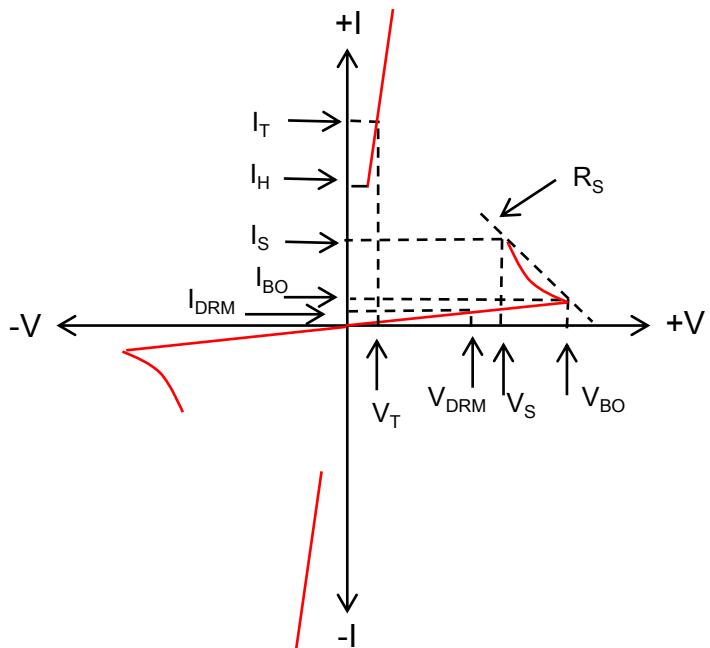


Figure 2.  $t_r \times t_d$  Pulse Wave-form

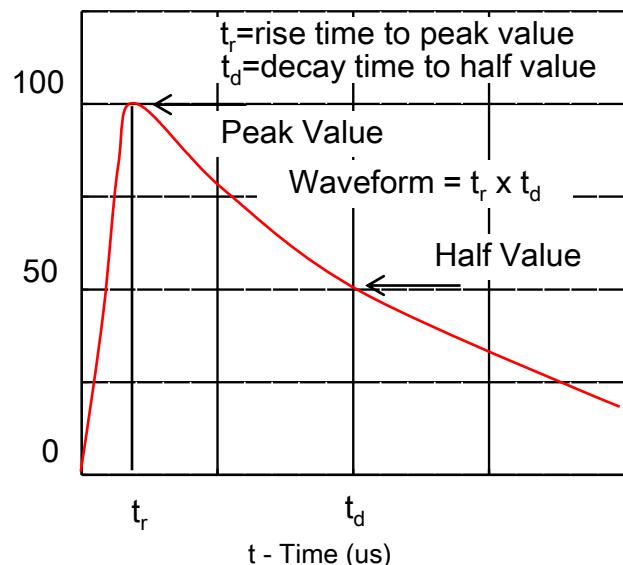


Figure 3. Normalized  $V_S$  Change versus Junction Temperature

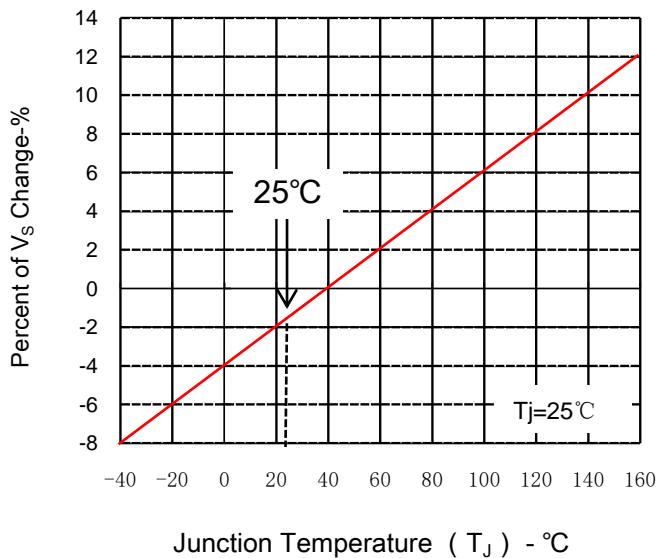


Figure 4. Normalized DC Holding Current versus Case Temperature

