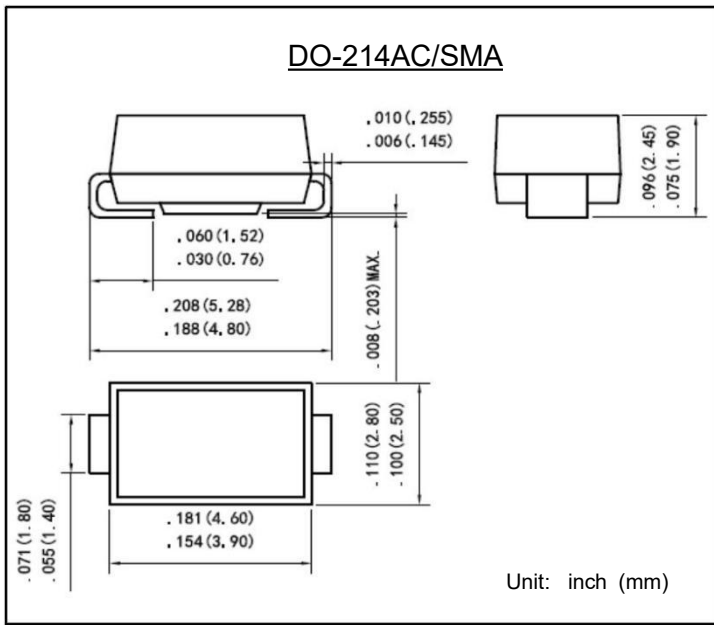




Surface Monument High Voltage Bidirectional Trigger Diode  
Breakdown Reverse Voltage 70 ~ 220 V

**KxxxSA Series**



**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 fatigue The 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 DO-214AC 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> (μA)	I <sub>DRM</sub> (μA)	I <sub>H</sub> (mA)
			Min.	Typ.	Max.					
K090SA	K090SA	70	79	93	97	4.0	1.0	500	1.0	50
K105SA	K105SA	90	95	105	110	4.0	1.0	500	1.0	50
K110SA	K110SA	95	104	110	118	4.0	1.0	500	1.0	50
K120SA	K120SA	100	110	122	125	4.0	1.0	500	1.0	50
K130SA	K130SA	110	120	135	138	4.0	1.0	500	1.0	50
K140SA	K140SA	120	130	140	146	4.0	1.0	500	1.0	50
K150SA	K150SA	125	135	155	160	4.0	1.0	500	1.0	50
K160SA	K160SA	130	140	163	170	4.0	1.0	500	1.0	50
K180SA	K180SA	160	165	180	195	4.0	1.0	500	1.0	50
K200SA	K200SA	180	190	205	215	4.0	1.0	500	1.0	50
K220SA	K220SA	190	205	220	230	4.0	1.0	500	1.0	50
K240SA	K240SA	200	220	240	250	4.0	1.0	500	1.0	50
K260SA	K260SA	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
DO-214AC	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

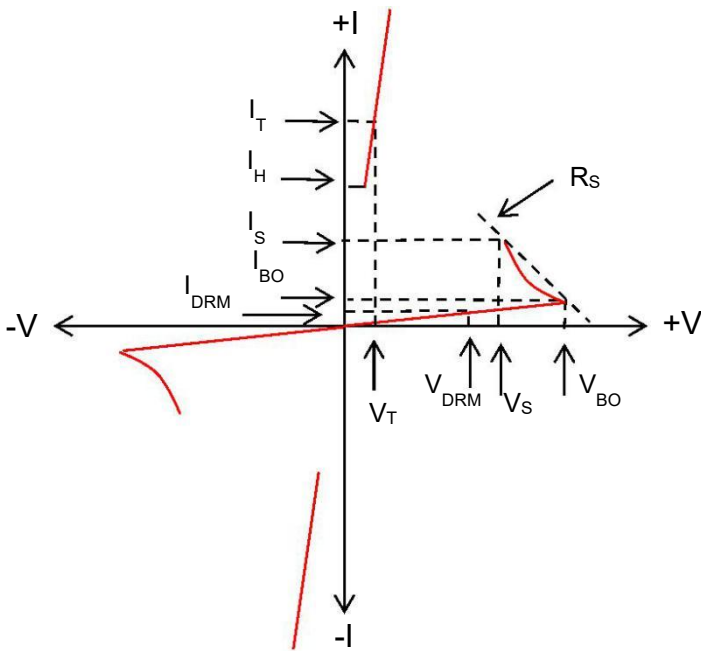


Figure 2.  $t_r \times t_d$  Pulse Wave-form

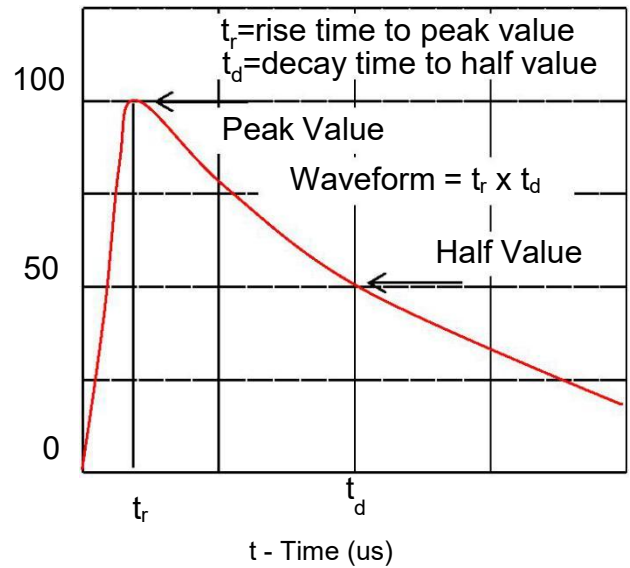


Figure 3. Normalized  $V_S$  Change versus Junction Temperature

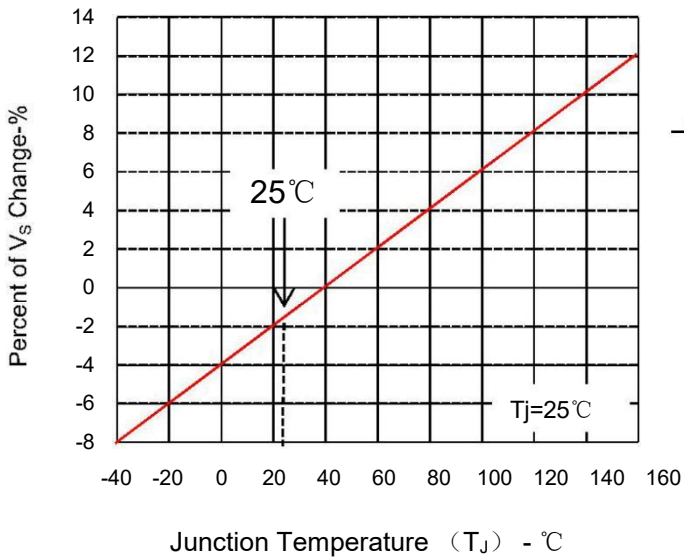


Figure 4. Normalized DC Holding Current versus Case Temperature

