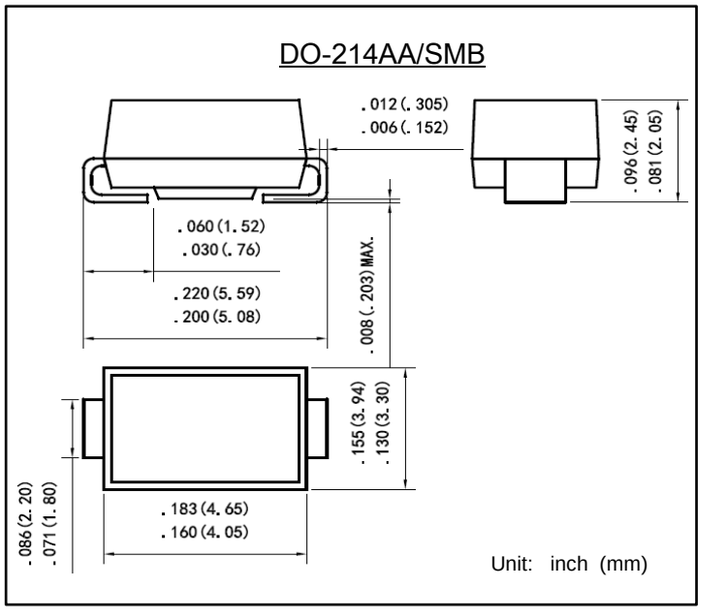
KxxxSB Series

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



Features

- Low reverse leakage
- High reliability
- High temperature soldering guaranteed:
  260℃/10seconds on teminals
- 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 DO-214AA Molded plastic
- Lead: Pure tin plated, lead free
- Mounting Position : Any

Electrical Parameters

Part Number	Marking	V_{DRM} (V)	V_{BO} (V)			V_T (V)	I_T (A)	I_{BO} (V)	I_{DRM} (V)	I_H (mA)
			Min.	Typ.	Max.					
K090SB	K090	70	79	93	97	4.0	1.0	500	1.0	50
K105SB	K105	90	95	105	110	4.0	1.0	500	1.0	50
K110SB	K110	95	104	110	118	4.0	1.0	500	1.0	50
K120SB	K120	100	110	122	125	4.0	1.0	500	1.0	50
K130SB	K130	110	120	135	138	4.0	1.0	500	1.0	50
K140SB	K140	120	130	140	146	4.0	1.0	500	1.0	50
K150SB	K150	125	135	155	160	4.0	1.0	500	1.0	50
K160SB	K160	130	140	163	170	4.0	1.0	500	1.0	50
K180SB	K180	180	165	180	195	4.0	1.0	500	1.0	50
K200SB	K200	180	190	205	215	4.0	1.0	500	1.0	50
K220SB	K220	190	205	220	230	4.0	1.0	500	1.0	50
K240SB	K240	200	220	240	250	4.0	1.0	500	1.0	50
K260SB	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℃.

Thermal Considerations

Package	Symbol	Parameter	Value	Unit
DO-214AA	T_J	Operating Junction Temperature	125	℃
	T_S	Storage Temperature Range	-40 to +125	℃
	$R_{\theta JA}$	Junction to Ambient on printed circuit	53	℃/W

Characteristics Curves

Figure 1. V-I Characteristics

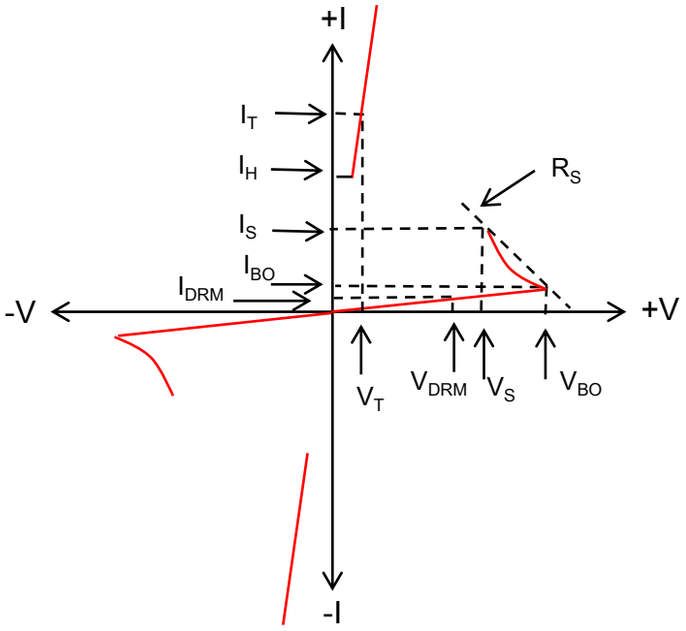


Figure 2. t_r x t_d Pulse Wave-form

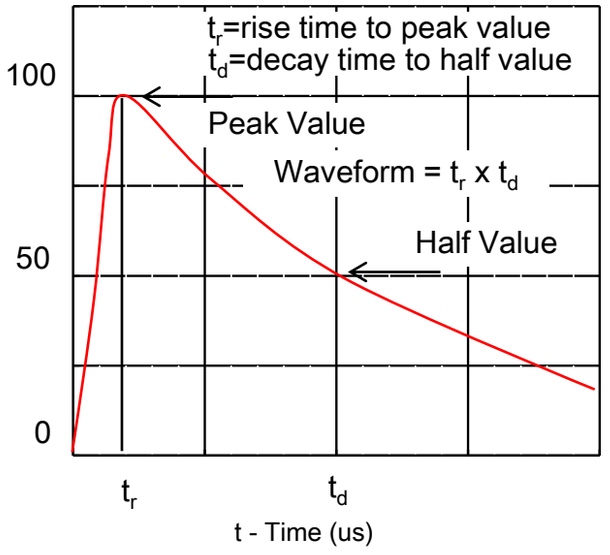


Figure 3. Normalized V_S Change versus Junction Temperature

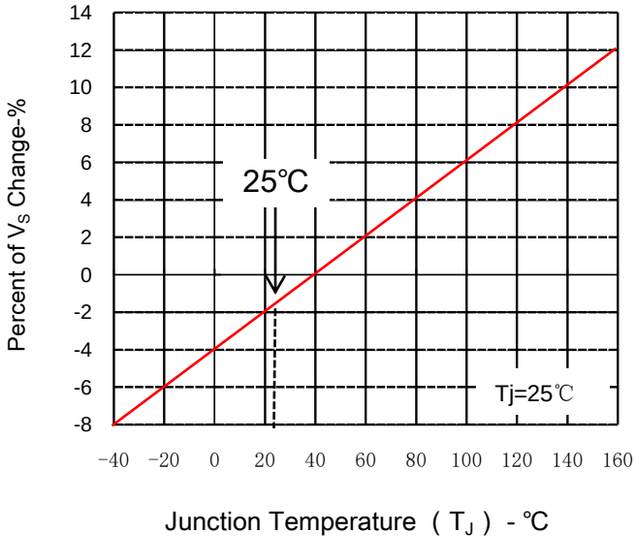


Figure 4. Normalized DC Holding Current versus Case Temperature