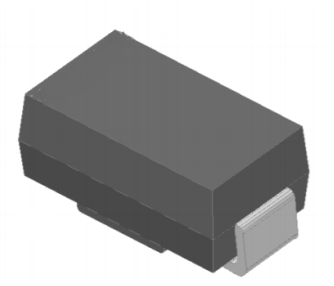
KxxxA SERIES

Surface Monument High Voltage Bidirectional Trigger Diode

Product Summary

I_T	1.0	A
V_{DRM}(V)	70 to 220	V



Symbol

Features

- Bidirectional overvoltage protect
- Low leakage current
- High surge current capability
- Quick response to surge voltage
- Industrial standard quality and reliability
- Halogen free, RoHs compliant

Applications

- High-voltage lamp ignitors
- Natural gas ignitors
- Gas oil ignitors
- Fluorescent lighting and HID lighting

Mechanical Data

- Case:SMA Plastic Package

Maximum Ratings(at Tc = 25 °C, unless otherwise specified)

Parameter	Symbol	Value	Unit
On-state RMS current	I_T	1.0	A
Maximum surge on-state current non-repetitive one cycle peak value(10ms)	I_{TSM}	16.7	A
Critical rate-of-rise of on-state current	di_T/dt	80.0	A/us
Operating junction temperature range	T_j	-40~125	℃
Storage temperature range	T_{stg}	-40~125	℃

Electrical Characteristics (Tj=25°C unless otherwise specified)

Part Number	Marking	V_{BO} (V)		I_{BO} (uA)	I_H (mA)	V_T(V) @I_T=1.0A	I_{DRM} (uA)	V_{DRM} (V)	R_S (KΩ)
		Min.	Max.		Max.	Max.	Max.		Min.
K090A	K090	80	97	50	50	2	1	70	0.1
K105A	K105	95	113	50	50	2	1	90	0.1
K120A	K120	110	125	50	50	2	1	100	0.1
K130A	K130	120	138	50	50	2	1	110	0.1
K150A	K150	140	170	50	50	2	1	130	0.1
K180A	K180	170	195	50	50	2	1	160	0.1
K200A	K200	190	215	50	50	2	1	180	0.1
K220A	K220	205	230	50	50	2	1	190	0.1
K240A	K240	220	250	50	50	2	1	200	0.1
K260A	K260	240	270	50	50	2	1	220	0.1

Characteristics Curves

Figure 1. V-I Characteristics

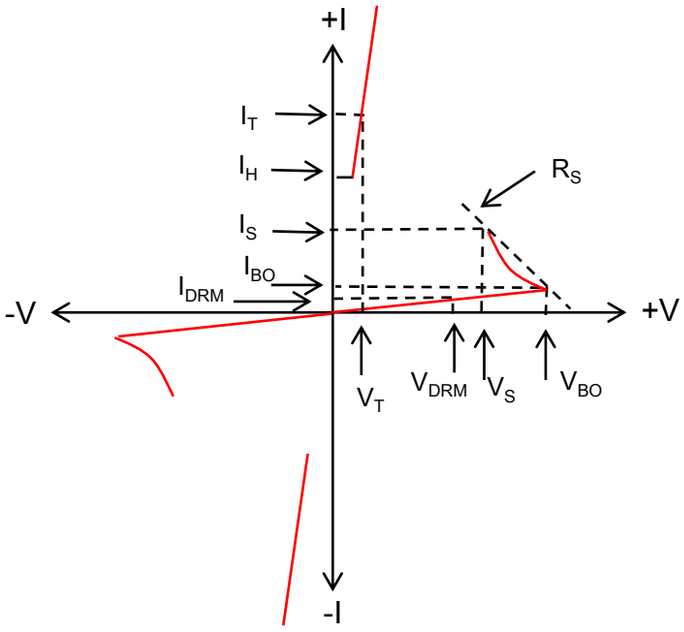


Figure 2. t_r x t_d Pulse Wave-form

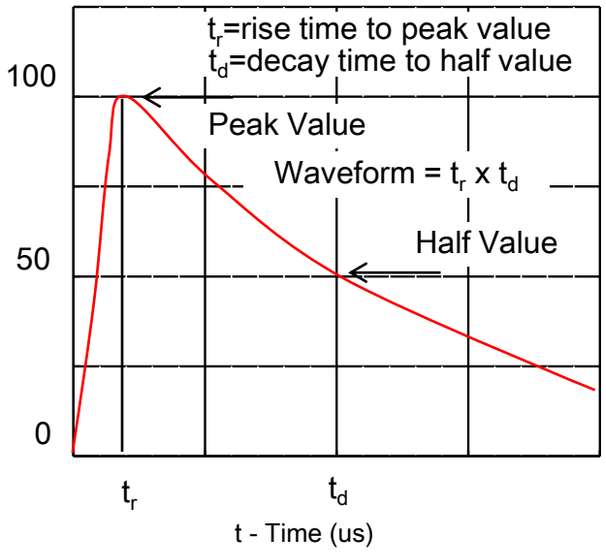


Figure 3. Normalized V_S Change versus Junction Temperature

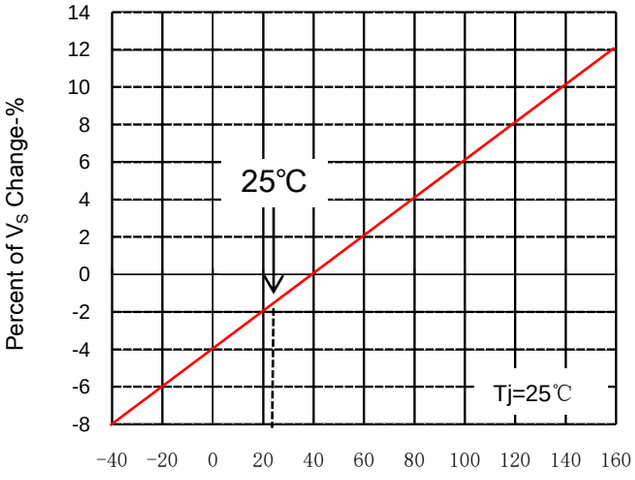
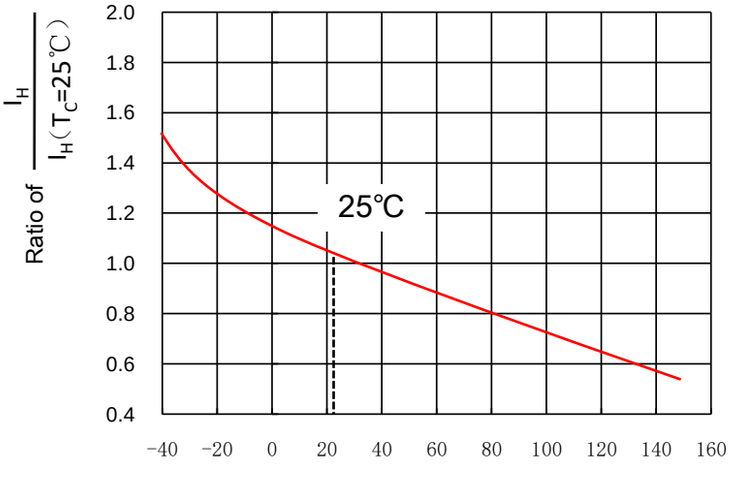
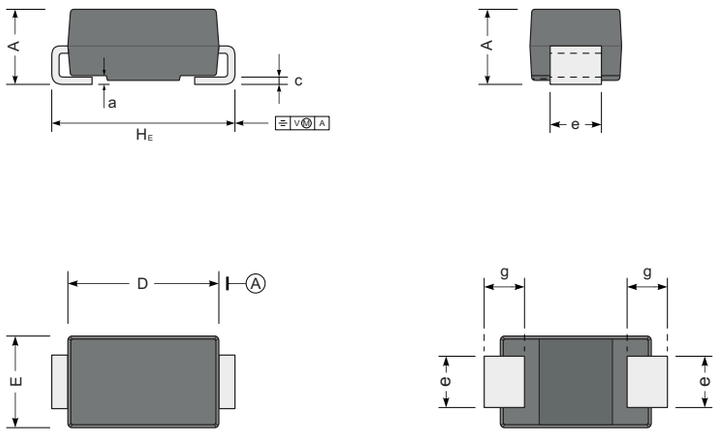


Figure 4. Normalized DC Holding Current versus Case Temperature



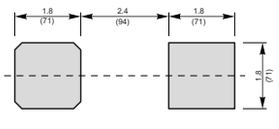
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads



UNIT		A	D	E	H_E	c	e	g	a
mm	max	2.3	4.5	2.7	5.2	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	
mil	max	90	181	106	205	12	63	59	12
	min	75	157	91	185	6	51	35	

The recommended mounting pad size



Unit : $\frac{mm}{(mil)}$