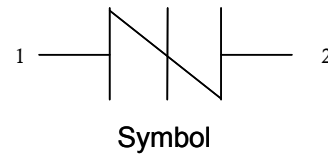


K0900G Series Sidac**APPLICATIONS:**

- ✧ High-voltage lamp ignitors
- ✧ Natural gas ignitors
- ✧ Gas oil ignitors
- ✧ High-voltage power supplies
- ✧ Xenon ignitors
- ✧ Overvoltage protector
- ✧ Pulse generators
- ✧ Fluorescent lighting ignitors HID lighting ignitors

**FEATURES:**

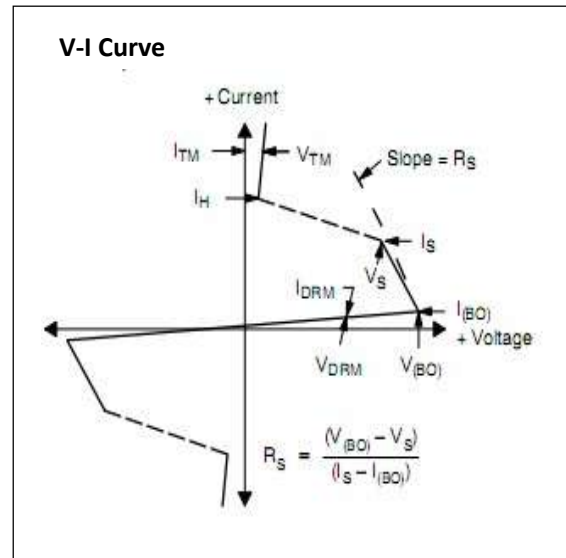
- ✧ Excellent capability of absorbing transient surge
- ✧ Quick response to surge voltage (ns Level)
- ✧ Glass-passivated junctions
- ✧ High voltage lcmp ignitors

ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Storage temperature range	T_{stg}	-40 to +125	$^{\circ}\text{C}$
Operating junction temperature range	T_j	-40 to +125	$^{\circ}\text{C}$
On-state RMS Current	I_T	1	A
Maximum surge on-state current non-repetitive one cycle peak value (50Hz)	I_{TSM}	16.7	A
Critical rate-of-rise of on-state current	di_T/dt	80	A

ELECTRICAL CHARACTERISTICS (T_A=25°C)

Symbol	Parameter
V _{DRM}	Peak off-state voltage
I _{DRM}	Off-state current
V _S	Switching voltage
I _S	Switching current
R _S	Switching resistance
V _T	On-state voltage
I _H	Holding current
V _{BO}	Breakover Voltage
I _{BO}	Breakover current



ELECTRICAL CHARACTERISTICS (T_A=25°C, continued)

Part Number	I _{DRM} @V _{DRM}		V _{BO}		I _{BO}	V _T @ I _T =1A	I _H	R _S	Marking
	μA	V	V		uA	V	mA	kΩ	
	max	min	min	max	max	max	min	min	
K0900G	1	70	80	97	50	2	10	0.1	K0900G
K1050G	1	90	95	113	50	2	10	0.1	K1050G
K1200G	1	100	110	125	50	2	10	0.1	K1200G
K1300G	1	110	120	138	50	2	10	0.1	K1300G
K1400G	1	120	130	146	50	2	10	0.1	K1400G
K1500G	1	130	140	170	50	2	10	0.1	K1500G
K1800G	1	160	170	195	50	2	10	0.1	K1800G
K2000G	1	180	190	215	50	2	10	0.1	K2000G
K2200G	1	190	205	230	50	2	10	0.1	K2200G
K2400G	1	200	220	250	50	2	10	0.1	K2400G
K2600G	1	220	240	270	50	2	10	0.1	K2600G

SOLDERING PARAMETERS

Reflow Condition		Pb-Free assembly (see FIG.2)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150 °C
	-Temperature Max($T_{s(max)}$)	+200 °C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L) (Liquid us)	+217 °C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_p)		+260(+0/-5) °C
Time within 5 °C of actual Peak Temp (t_p)		8-15 secs.
Ramp-down Rate		6°C/sec. Max
Time 25 °C to Peak Temp (T_p)		8 min. Max
Do not exceed		+260 °C

FIG.1: Maximum allowable ambient temperature versus on-state current

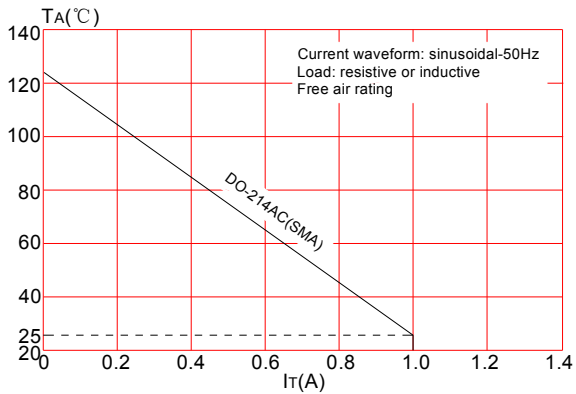


FIG.2: Reflow condition

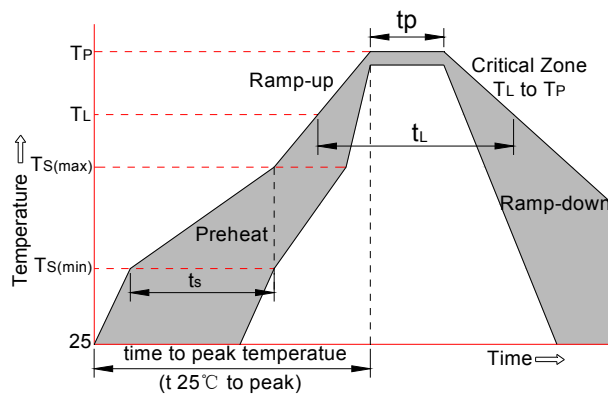


FIG.3: Normalized V_s change vs. junction temperature

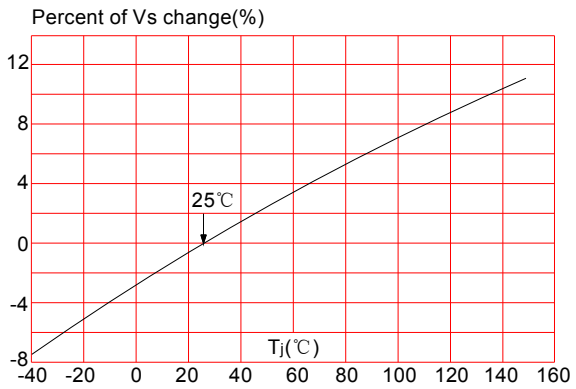
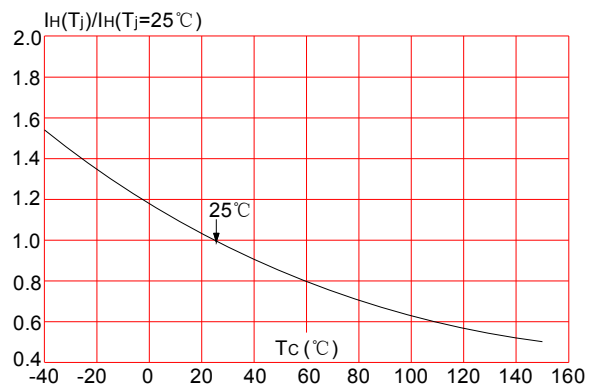
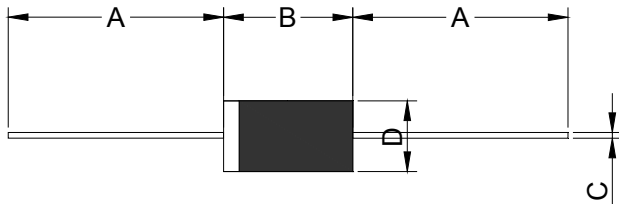


FIG.4: Normalized DC holding current vs. case temperature



PACKAGE MECHANICAL DATA



Ref.	Dimensions			
	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	1.000	-	25.40	-
B	0.228	0.300	5.80	7.62
C	0.027	0.035	0.69	0.89
D	0.118	0.140	3.00	3.60