

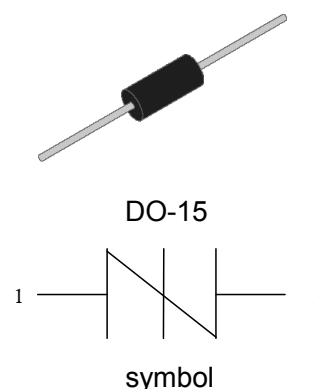


DESCRIPTION:

The sidac is a silicon bilateral voltage triggered switch with greater power-handling capabilities than standard diacs. Upon application of a voltage exceeding the sidac breakover voltage point, the sidac switches on through a negative resistance region to a low on-state voltage. Conduction continues until the current is interrupted or drops below the minimum holding current of the device.

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:

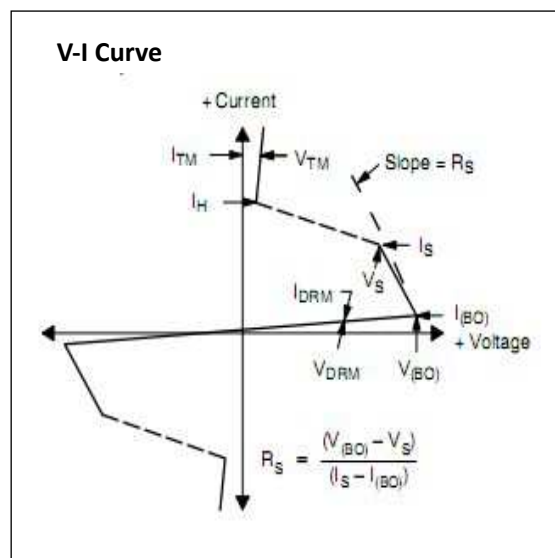
- ✧ Excellent capability of absorbing transient surge
- ✧ Quick response to surge voltage (ns Level)
- ✧ Glass-passivated junctions
- ✧ High voltage lcmp ignitors

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	1.0	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/ μs

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$)

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** ($T_A=25^{\circ}\text{C}$, continued)

Part Number	$I_{\text{DRM}}@V_{\text{DRM}}$		V_{BO}		I_{BO}	$V_T@ I_T=1\text{A}$	I_H	R_S	Marking
	μA	V	V		μA	V	mA	k Ω	
	max	min	min	max	max	max	min	min	
K0900G	1	70	80	97	50	2	10	0.1	DB090
K1050G	1	90	95	113	50	2	10	0.1	DB105
K1200G	1	100	110	125	50	2	10	0.1	DB120
K1300G	1	110	120	138	50	2	10	0.1	DB130
K1400G	1	120	130	146	50	2	10	0.1	DB140
K1500G	1	130	140	170	50	2	10	0.1	DB150
K1800G	1	160	170	195	50	2	10	0.1	DB180
K2000G	1	180	190	215	50	2	10	0.1	DB200BW
K2200G	1	190	205	230	50	2	10	0.1	DB220BW
K2400G	1	200	220	250	50	2	10	0.1	DB240BW
K2600G	1	220	240	270	50	2	10	0.1	DB260BW

ORDERING INFORMATION

Series code K:Sidac	K	xxx	0	G
Median voltage			0: Bi-direction 1: Uni-direction	Package type:DO-15

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) (t_s)	60-180 secs.
Average ramp up rate (Liquidus 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) (Liquidus)	+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)		30 secs. Max
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

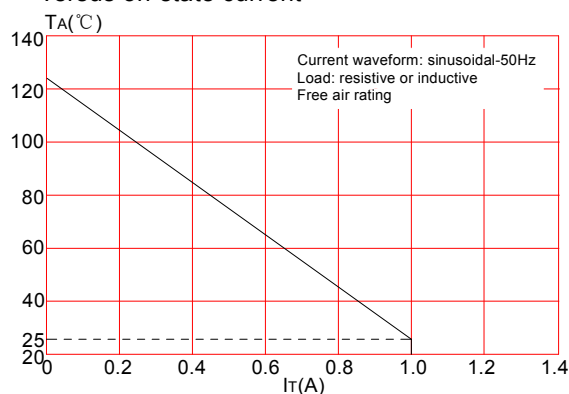


FIG.2: Reflow condition

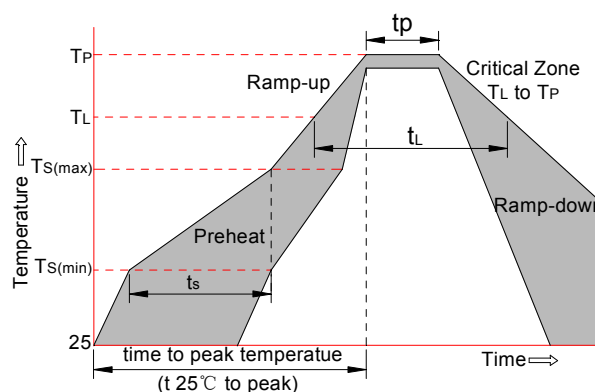
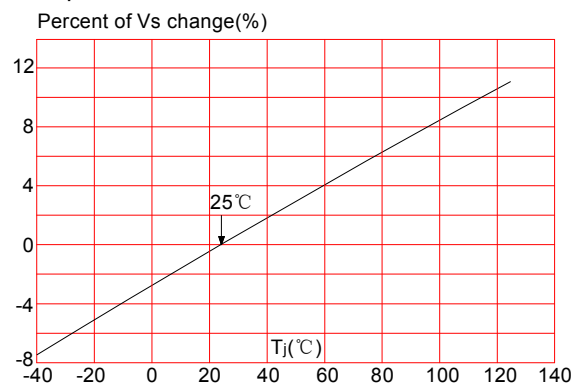
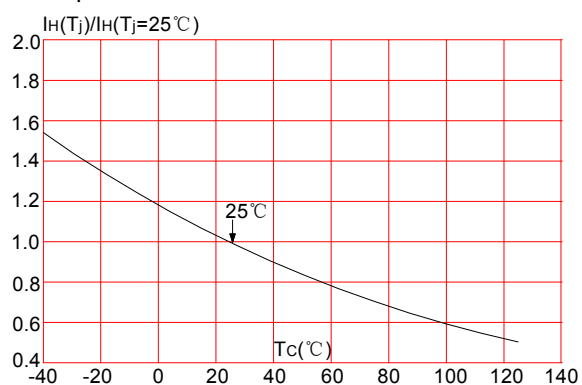
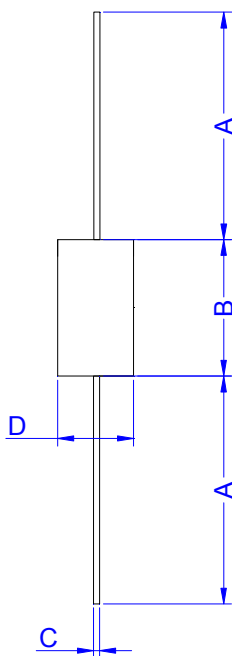


FIG.3: Normalized V_s change vs. junction temperature**FIG.4:** Normalized DC holding current vs. case temperature**PACKAGE MECHANICAL DATA**

DO-15

Ref.	Dimensions			
	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	1.000	-	25.40	-
B	0.228	0.300	5.80	7.62
C	0.022	0.035	0.56	0.89
D	0.102	0.142	2.60	3.60

Part Number	UNIT WEIGHT (g/PCS) typ.	Case Type	Quantity	Packing Option
KxxxxG	0.38	DO-15/DO-204AC	2000	Box

Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co.,Ltd assumes no responsibility for the consequences of use without consideration for such information nor use beyond it. Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement. Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information. This document is the third version which is made in 10-May-2017. This document supersedes and replaces all information previously supplied.

 is a registered trademark of Jiangsu JieJie Microelectronics Co.,Ltd.
Copyright ©2017 Jiangsu JieJie Microelectronics Co.,Ltd. Printed All rights reserved.