

## ■ Features

- AC circuit oriented
- Glass-passivated junctions
- High surge current capability

## ■ Applications

- High voltage lamp ignitors
- Natural gas ignitors
- Gas oil ignitors
- High voltage power supplies
- Xenon ignitors
- Over voltage protector
- Pulse generators
- Fluorescent lighting ignitors
- HID surge current capability

## ■ General 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.

CERAMATE offers a voltage range of 95 V to 330 V in DO-15 package.

CERAMATE's sidacs feature glass passivated junctions to ensure a rugged and dependable device capable of withstanding harsh environments.

Variations of devices covered in this data sheet are available for custom design applications. Consult the factory for more information.

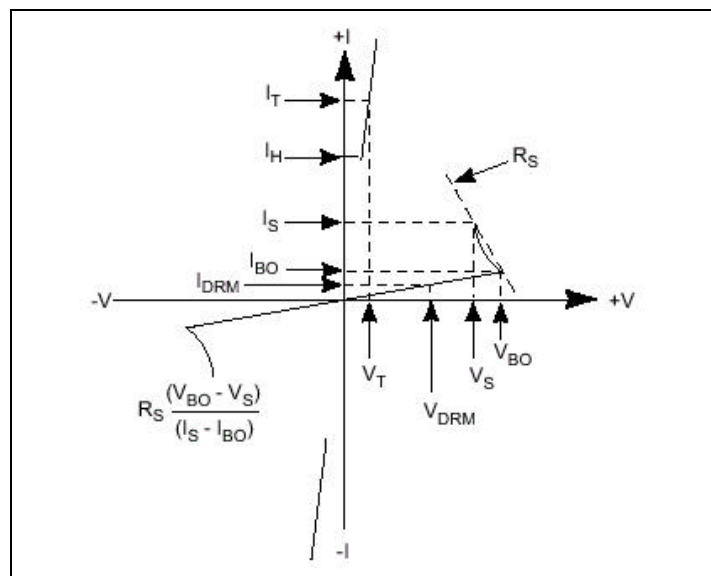
## ■ Electrical Characteristics

Part No	$V_{BO}$		$V_{DRM}$	$I_{DRM}$	$I_T$	$I_H$	$V_{TM}$
	Breakover Voltage (Instantaneous clamping voltage)		Blocking Voltage	Peak Off-state Current at $V_{DRM}$	Continuous On-state DC or RMS Current	Holding Current	Peak On-state Voltage $I_T = 1A$
	MIN (V)	MAX (V)	MIN (V)	MAX ( $\mu A$ )	MAX (A)	MAX (mA)	MAX (V)
K105	95	113	75	10	1.0	100	1.5
K110	104	118	85	10	1.0	100	1.5
K120	110	125	90	10	1.0	100	1.5
K130	120	138	95	10	1.0	100	1.5
K140	130	146	105	10	1.0	100	1.5
K150	140	170	115	10	1.0	100	1.5
K200	190	215	150	10	1.0	100	1.5
K220	205	230	165	10	1.0	100	1.5
K240	220	250	175	10	1.0	100	1.5
K250	240	280	190	10	1.0	100	1.5
K300	270	330	215	10	1.0	100	1.5

\* All specs and applications shown above subject to change without prior notice.

Series	$I_{PP}$			$I_{TSM}$		$di/dt$
	Peak pulse current, $T_J < 150^\circ C$			Peak one Cycle(sinusoidal) Surge Current		Critical Rate of Rise of On-state Current
	(10x160 $\mu$ s)	(10x560 $\mu$ s)	(10x1000 $\mu$ s)	60Hz (A)	50Hz (A)	
	Max (A)	Max (A)	Max (A)			TYPICAL (A/ $\mu$ s)
K	60	35	35	20	16.7	100

### ■ V-I Characteristics



### ■ Package Dimensions

K Series / DO-15	Ref	Inches		Millimeters	
		Min	Max	Min	Max
	A	1.0		25.4	
	B	0.22	0.30	5.60	7.60
	C	0.028	0.035	0.70	0.90
	D	0.10	0.15	2.60	3.80

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