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### Features

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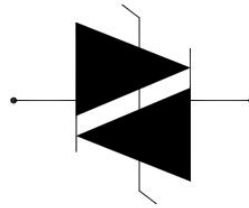
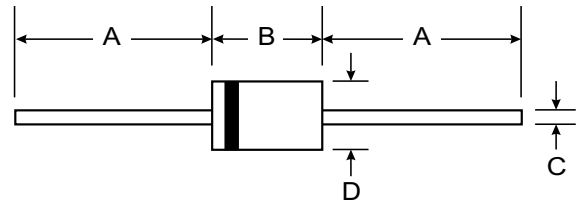
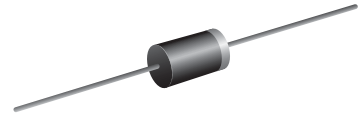
- Excellent capability of absorbing transient surge
- Quick response to surge voltage (ns Level)
- Glass passivated junctions
- High voltage lcmp ignitors

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### Mechanical Data

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- Case : DO-15 Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.465 gram



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Functional Diagram

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### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

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Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

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

## Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Part Number	V <sub>DRM@IDRM</sub>		V <sub>BO</sub>		I <sub>BO</sub>	v <sub>T@IT=1A</sub>	R <sub>s</sub>	I <sub>H</sub>
	V	uA	V		uA	V	K	mA
	Min	Max	Min	Max	Max	Max	Min	Min
K0900G	70	1	80	97	50	2	0.1	10
K1050G	90	1	95	113	50	2	0.1	10
K1200G	100	1	110	125	50	2	0.1	10
K1300G	110	1	120	138	50	2	0.1	10
K1400G	120	1	130	146	50	2	0.1	10
K1500G	130	1	140	170	50	2	0.1	10
K1800G	160	1	170	195	50	2	0.1	10
K2000G	180	1	190	215	50	2	0.1	10
K2200G	190	1	205	230	50	2	0.1	10
K2400G	200	1	220	250	50	2	0.1	10
K2600G	220	1	240	270	50	2	0.1	10

## Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Symbol	Parameter
V <sub>DRM</sub>	Peak off-state voltage
I <sub>DRM</sub>	Off-state current
V <sub>s</sub>	Switching voltage
I <sub>s</sub>	Switching current
R <sub>s</sub>	Switching resistance
V <sub>T</sub>	On-state voltage
I <sub>H</sub>	Holding current
V <sub>BO</sub>	Break over Voltage
I <sub>BO</sub>	Break over current

## V-I Curve

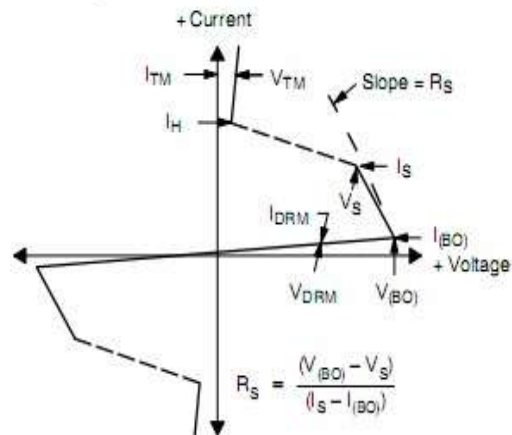


Figure 1-Normalized vs change vs. junction temperature

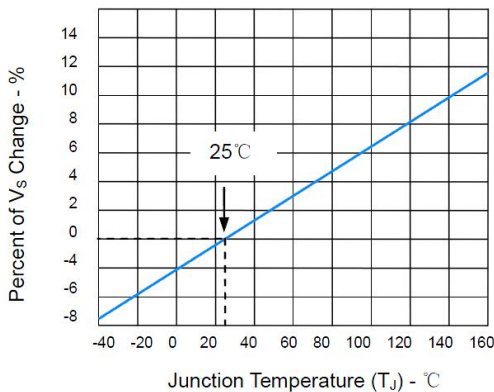
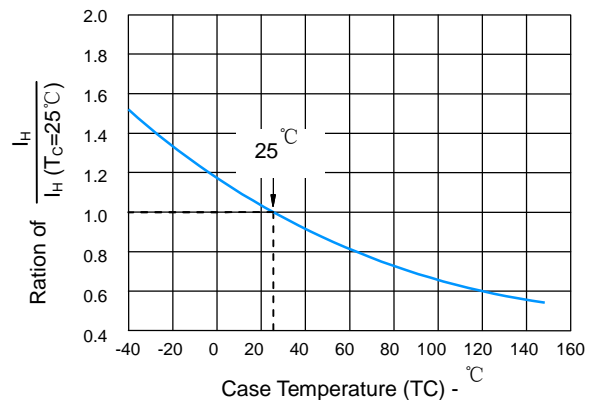
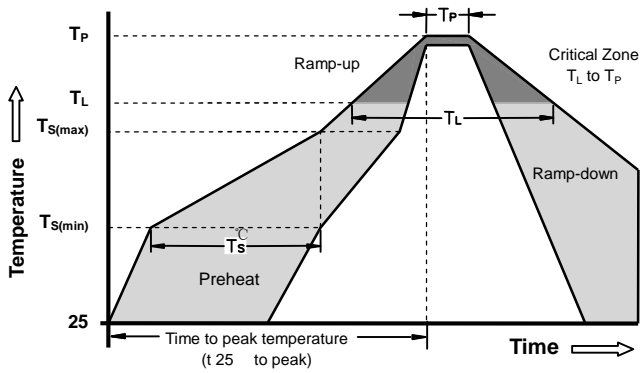


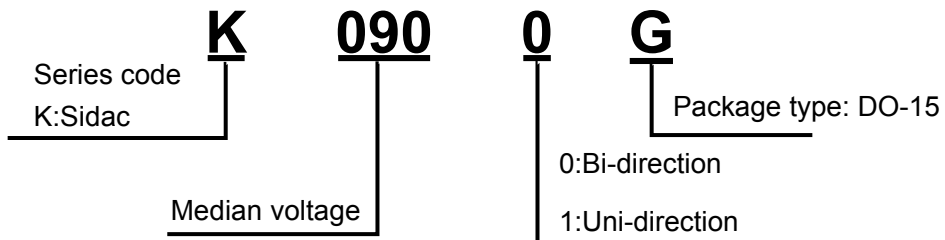
Figure 2- Normalized DC holding current vs.case temperature



### Soldering Parameters



Reflow Condition		Lead-free assembly
Pre Heat	-Temperature Min ( $T_{s(min)}$ )	+150°C
	-Temperature Max ( $T_{s(max)}$ )	+200°C
	-Time (min to max) ( $t_s$ )	60 -180 Seconds
Average ramp up rate ( Liquidus Temp $T_L$ ) to peak		3°C/Second Max
$T_{s(max)}$ to $T_L$ - Ramp-up Rate		3°C/Second Max
Reflow	- Temperature ( $T_L$ ) (Liquidus)	+217°C
	- Time (min to max) ( $t_s$ )	60 -150 Seconds
Peak Temperature ( $T_P$ )		260 +0/-5°C
Time within 5°C of actual peak Temperature ( $t_p$ )		8-15 Seconds
Ramp-down Rate		6°C/Second Max
Time 25°C to peak Temperature ( $T_P$ )		8 minutes Max
Do not exceed		+260°C



### Ordering Information