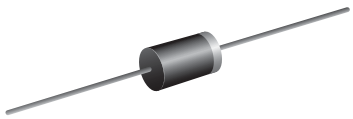
K0900G - K2600G

Axial Leaded Silicon Bilateral Voltage Triggered



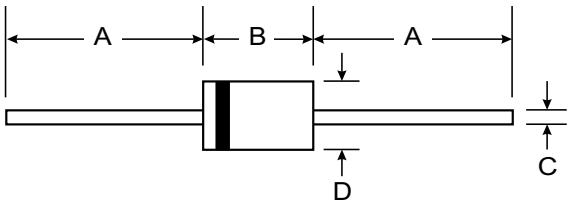
Features

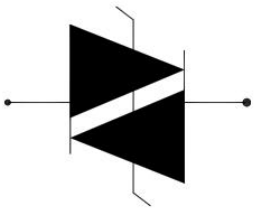
- Excellent capability of absorbing transient surge
- Quick response to surge voltage (ns Level)
- Glass passivated junctions
- High voltage lcmp ignitors

Mechanical Data

- 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

RoHS COMPLIANT





Functional Diagram

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		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

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

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

Electrical Characteristics (@ 25°C Unless Otherwise Specified)

Part Number	V DRM@IDRM		V BO		IBO	vT@IT=1A	RS	IH
	V	uA	V		uA	V	KΩ	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_{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}	Break over Voltage
I_{BO}	Break over current

V-I Curve

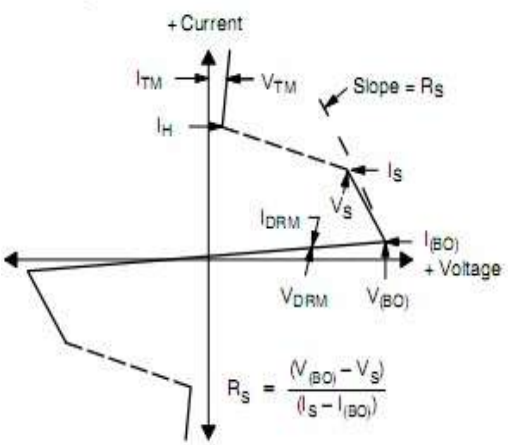


Figure 1-Normalized vs change vs. junction temperature

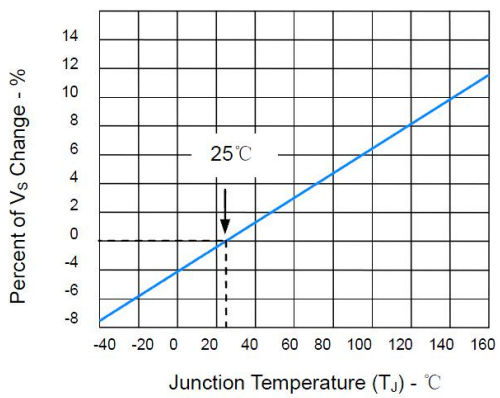
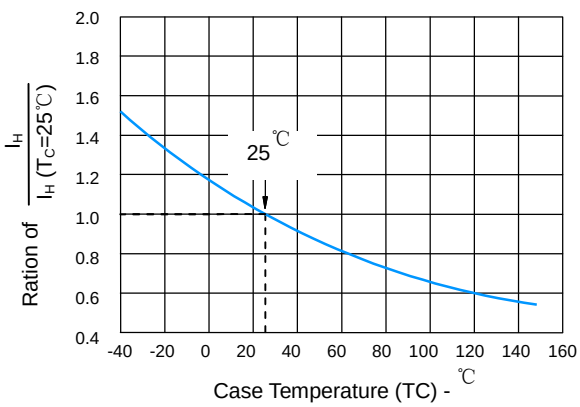
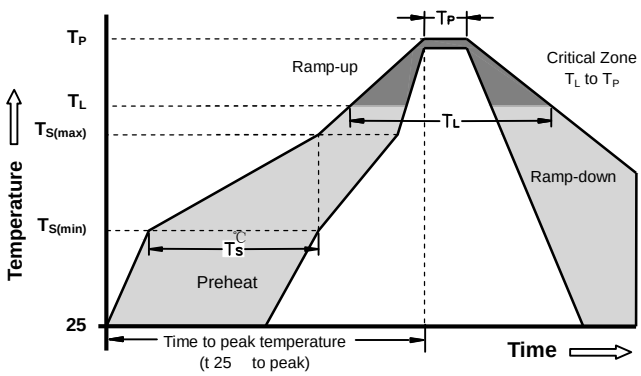


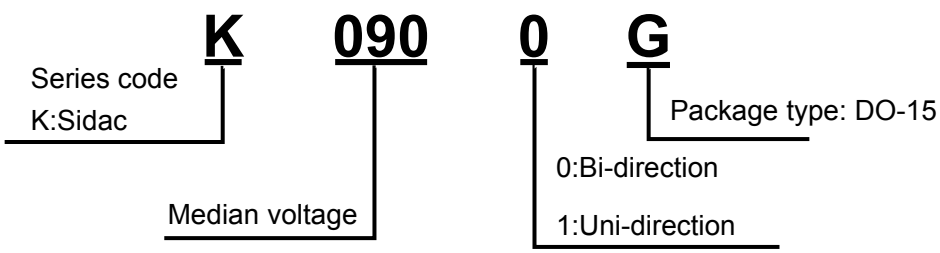
Figure 2- Normalized DC holding current vs.case temperature



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