

# K1VZL09

## SIDACs / Bi-directional (K1V Series)

5V, 5μA

### Feature

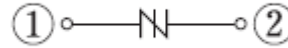
- Bi-directional type
- Wide-ranging pulse generation
- Direct switching with commercial power
- A reliable product with a track record, developed for many applications
- Pb free terminal
- RoHS:Yes

### OUTLINE

Package (House Name): 1F  
 Package (JEDEC Code): DO-214AC



### Equivalent circuit



### Absolute Maximum Ratings (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-40 to 125	°C
Junction temperature	Tj		125	°C
Repetitive peak off-state voltage	V <sub>DRM</sub>		5	V
On-state current (r.m.s.)	I <sub>T</sub> (RMS)	Tl=110°C, 50Hz sine wave, θ=180°	0.5	A

※ :See the original Specifications

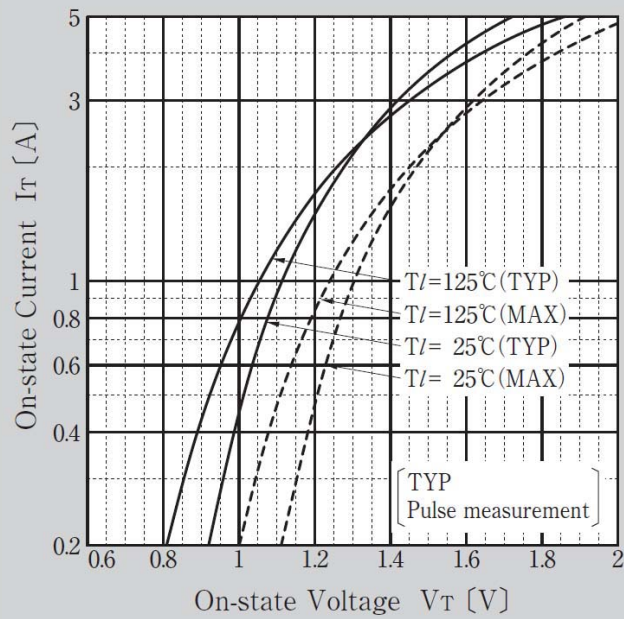
### Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakover voltage	V <sub>BO</sub>	dv/dt=8V/ms, Pulse measurement	8		12	V
Off-state current	I <sub>DRM</sub>	VD=5V			5	μA
Breakover current	I <sub>BO</sub>				20	mA
Holding current	I <sub>H</sub>				20	mA
On-state voltage	V <sub>T</sub>	IT=0.5A			1.2	V
Thermal Resistance	Rth(j-l)	Junction to lead			23	°C/W

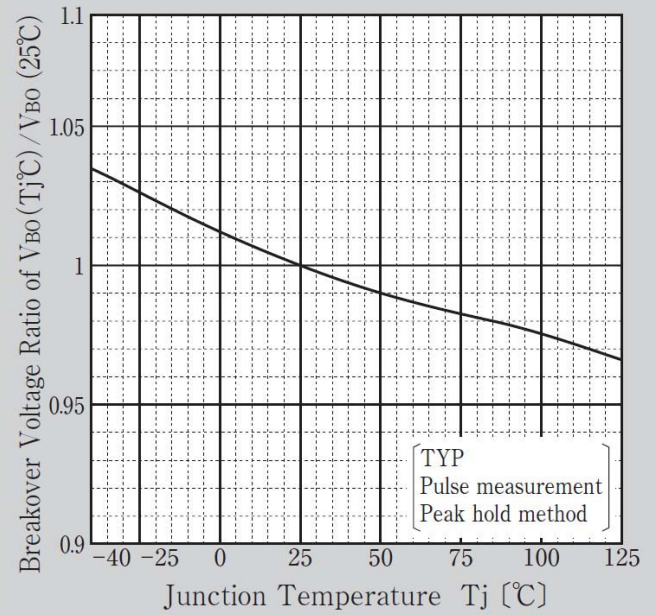
※ :See the original Specifications

# CHARACTERISTIC DIAGRAMS

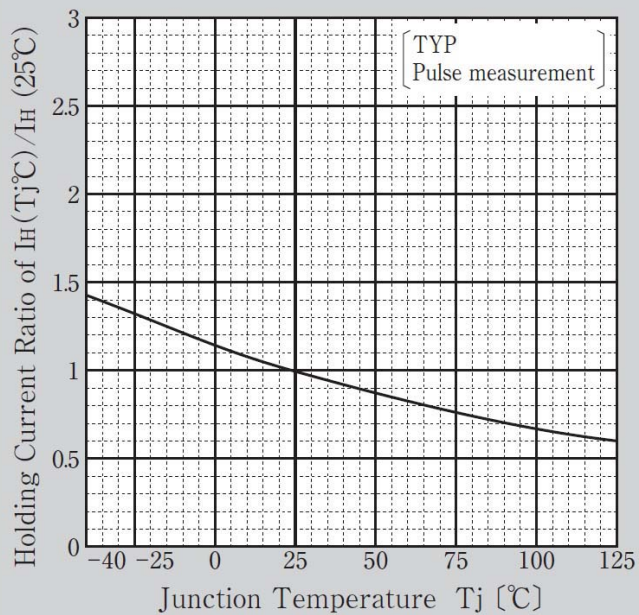
### On-state Voltage vs On-state Current



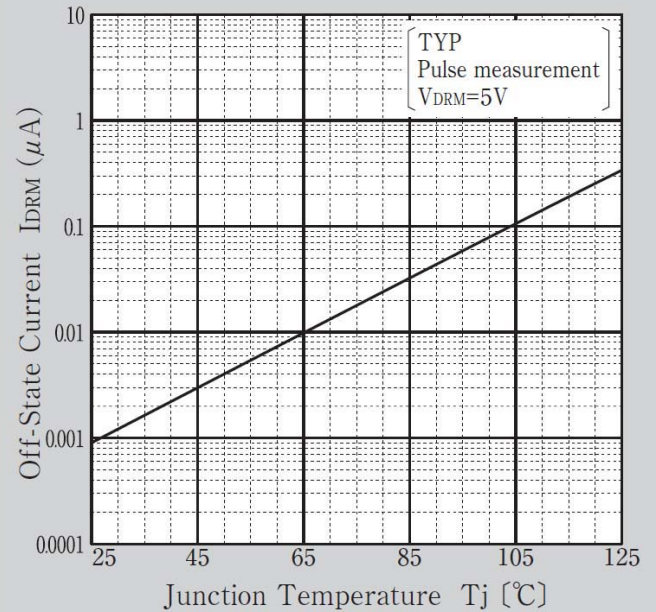
### Breakover Voltage vs Junction Temperature



### Holding Current vs Junction Temperature

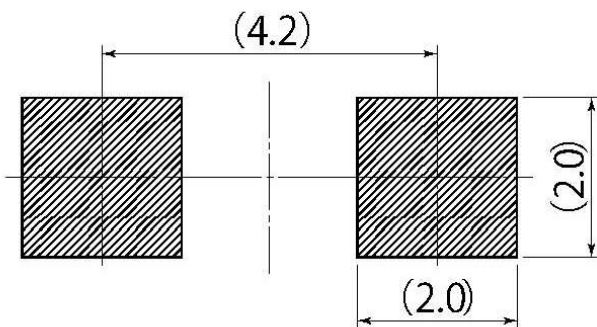
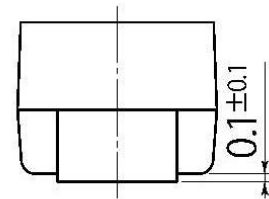
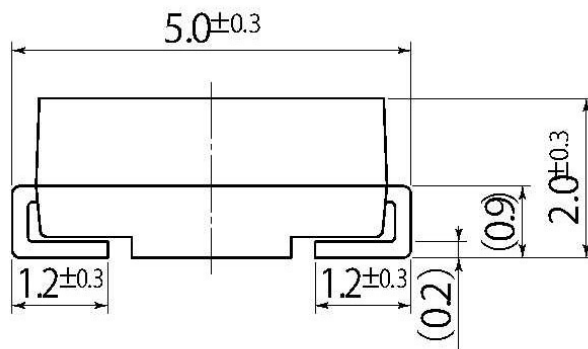
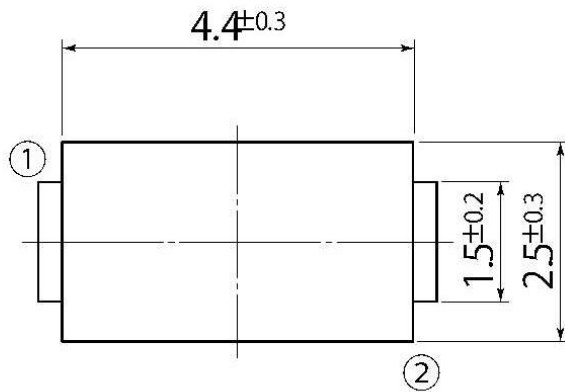


### Off-State Current vs Junction Temperature



B4

JEDEC Code	DO-214AC
JEITA Code	—
House Name	1F



Referential Soldering Pad

• Optimize soldering pad to the board design and soldering condition.