ShinDengen

K1VZL09

SIDACs / Bi-directional (K1V Series)

5V, 5µA

Feature

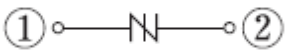
- Bi-directional type
- Wide-ranging pulse generation
- Direct switching with commercial power
- A reliable product with a track record, developed for many applications
- Pb free terminal
- RoHS:Yes

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 temperrature	Tstg		-40 to 125	°C
Junction temperature	Tj		-40 to 125	°C
Repetitive peak off-state voltage	V_{DRM}		5	V
On-state current (r.m.s.)	I_T(RMS)	Tl=110°C, 50Hz sine wave, θ=180˚	0.5	A

※ ：See the original Specifications

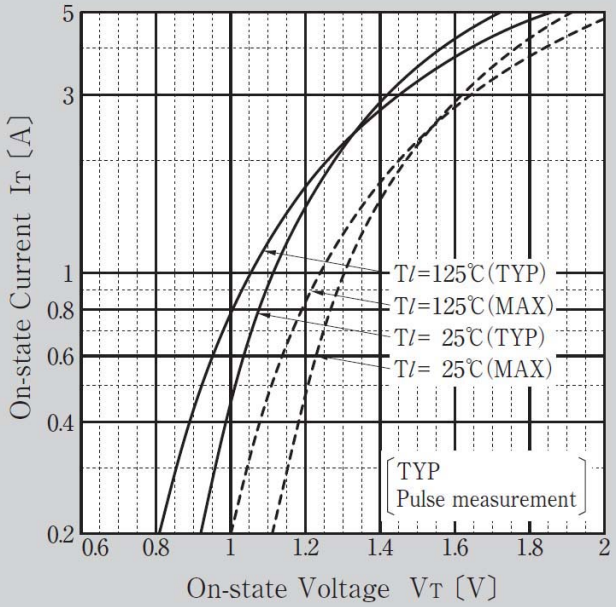
Electrical Characteristics (unless otherwise specified : Tl=25°C)

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

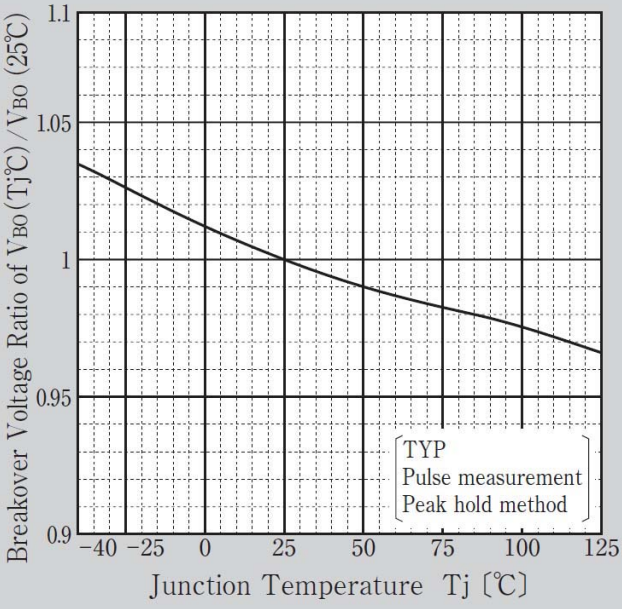
※ ：See the original Specifications

CHARACTERISTIC DIAGRAMS

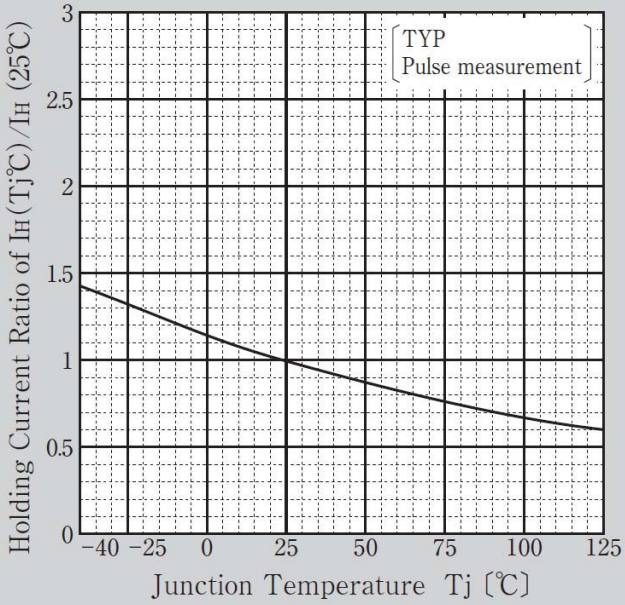
On-state Voltage vs On-state Current



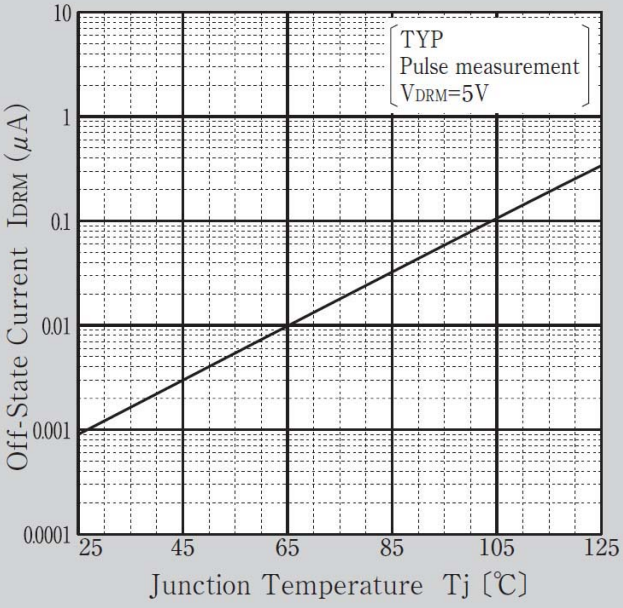
Breakover Voltage vs Junction Temperature



Holding Current vs Junction Temperature



Off-State Current vs Junction Temperature

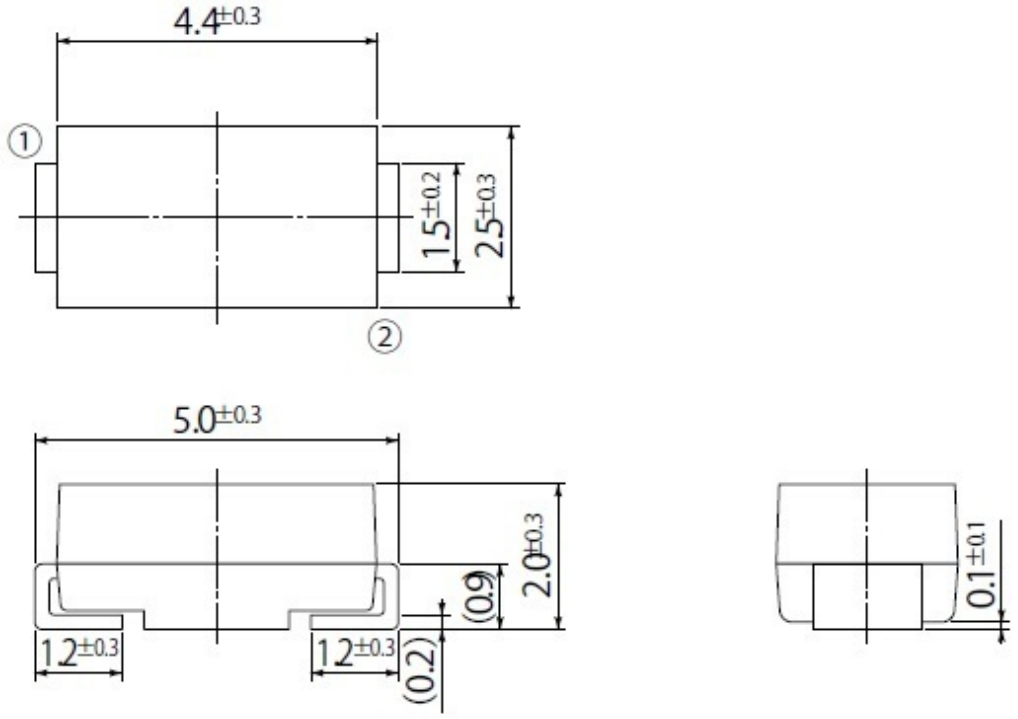


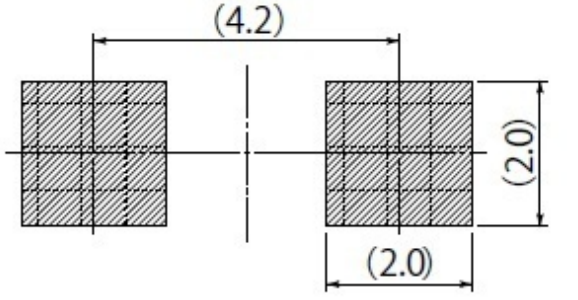
Outline Dimensions

unit:mm

B4

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

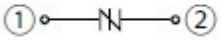




Referential Soldering Pad

・Optimize soldering pad to the board design and soldering condi tion.

Fig. B4-3



・The content specified herein is subject to change for improvement without notice.
・If you wish to use any such products, please be sure to refer to the specifications.

U182-1(2026.09)

Notes

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   【Standard applications】
   Computers, office automation and other office equipment, communication terminals, test and measurement equipment, audio/visual equipment, amusement equipment, consumer electronics, machine tools, personal electronic equipment, industrial equipment, etc.
   【Special applications】
   Transportation equipment (vehicles, ships, etc.), trunk-line communication equipment, traffic signal control systems, anti-disaster/crime systems, safety equipment, medical equipment, etc.
   【Specific applications】
   Nuclear reactor control systems, aircraft, aerospace equipment, submarine repeaters, life support equipment and systems, etc.
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