ShinDengen

G1VL22C

SIDACs / Uni-directional (G1V Series)
190V, 280A

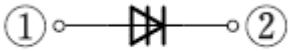
Feature

- Uni-directional
- Miniaturized compared to a K1V series
- For pulse generation, DC power with switching operation
- 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℃)

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-40 to 125	℃
Junction temperature	Tj		125	℃
Maximum off-state voltage	$V_{DRM(A)}$		190	V
RMS on-state current	I_T	Tl=98℃, 50Hz sine wave, θ=180˚	1	A
Pulse on-state current	I_{TRM}	Ta=25℃, pulse width 10μs, 5Hz sine wave	280	A
Critical rate of rise of on-state current	di_T/dt		150	A/μs

※ ：See the original Specifications

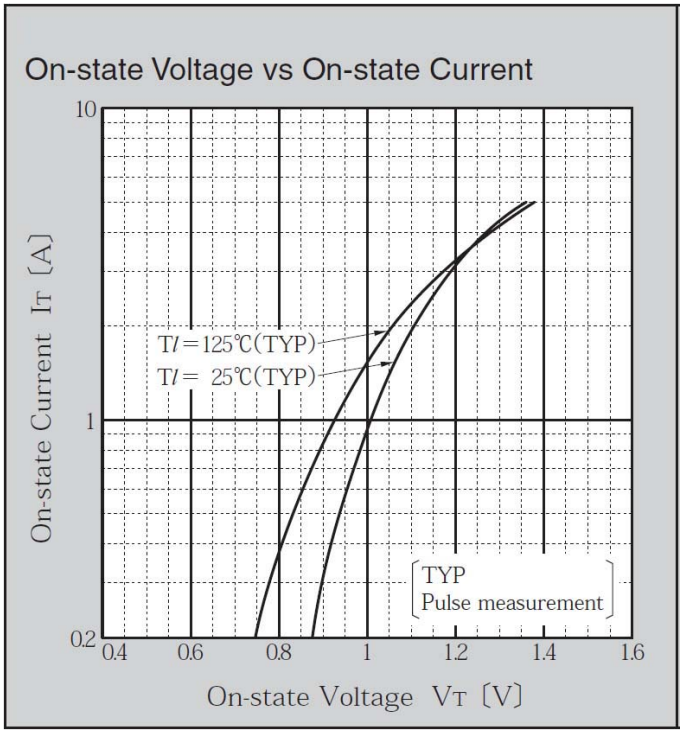
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakover voltage	$V_{BO(A)}$	Pulse measurement, dv/dt=4V/ms	210		230	V
Off-state current	$I_{DRM(A)}$	VD=190V			10	μA
Breakover current	$I_{BO(A)}$	VBO-0.5V			0.5	mA
Holding current	$I_{H(A)}$				60	mA
Holding current	$I_{H(K)}$				60	mA
On-state voltage	$V_{T(A)}$	IT=1A			1.5	V
On-state voltage	$V_{T(K)}$	IT=1A			1.5	V
Switching resistance	$R_{S(A)}$		0.1			kΩ
Thermal resistance	Rth(j-l)	Junction to lead			23	°C/W

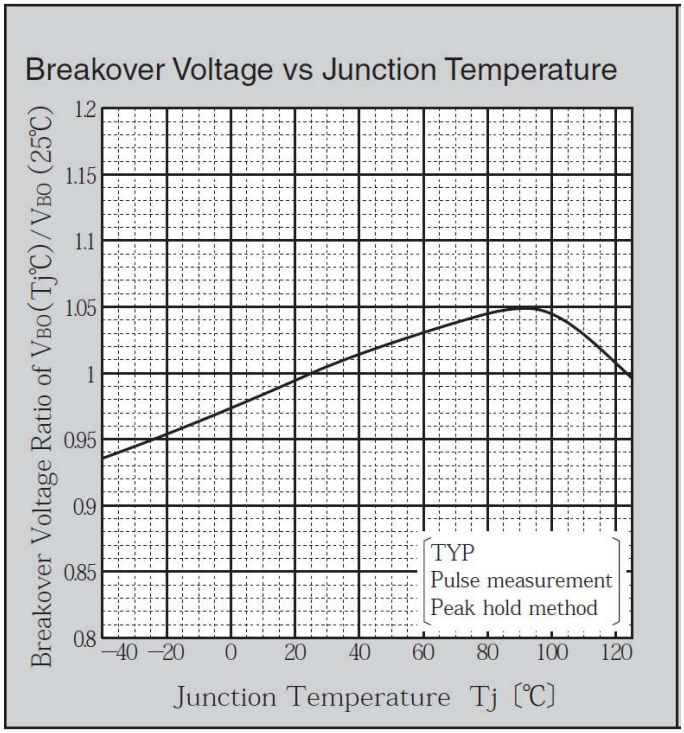
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

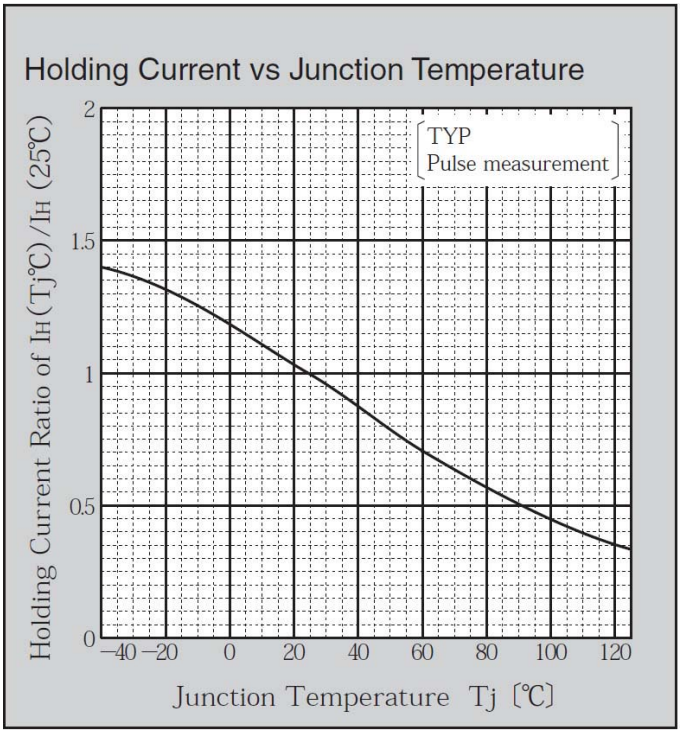
On-state Voltage vs On-state Current



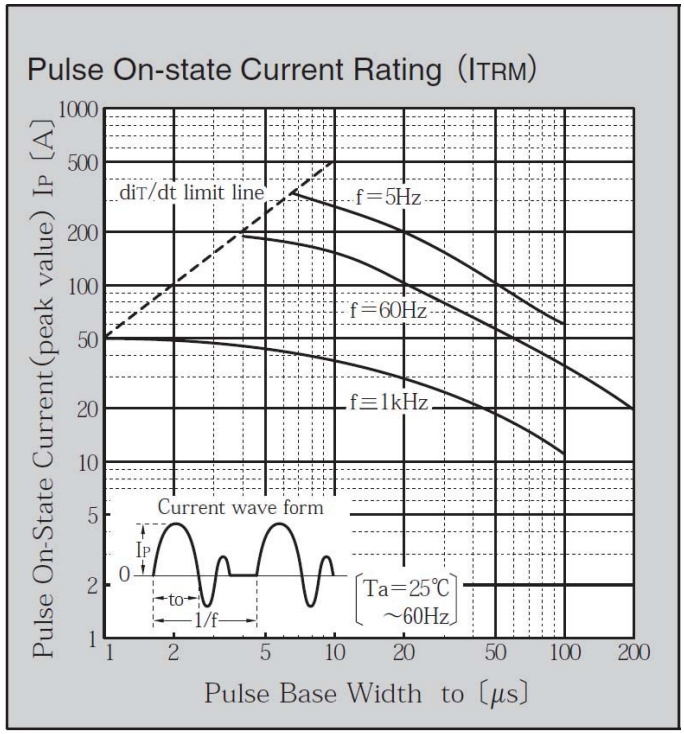
Breakover Voltage vs Junction Temperature



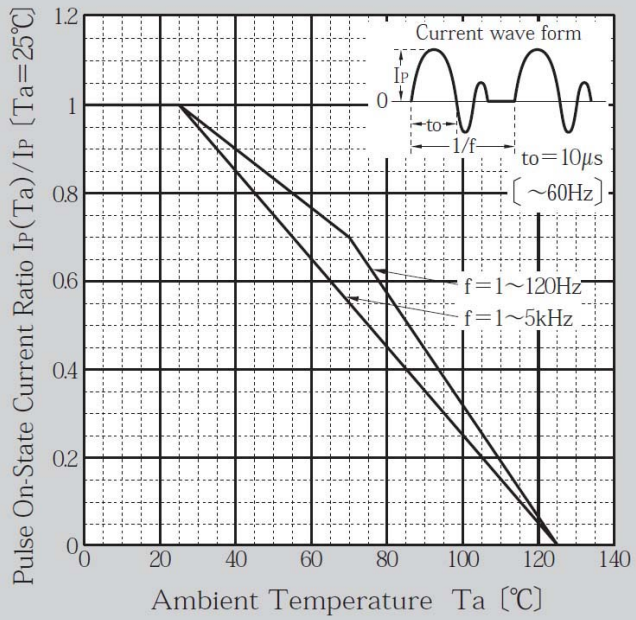
Holding Current vs Junction Temperature



Pulse On-state Current Rating (ITRM)



Pulse On-state Current Derating (ITRM)



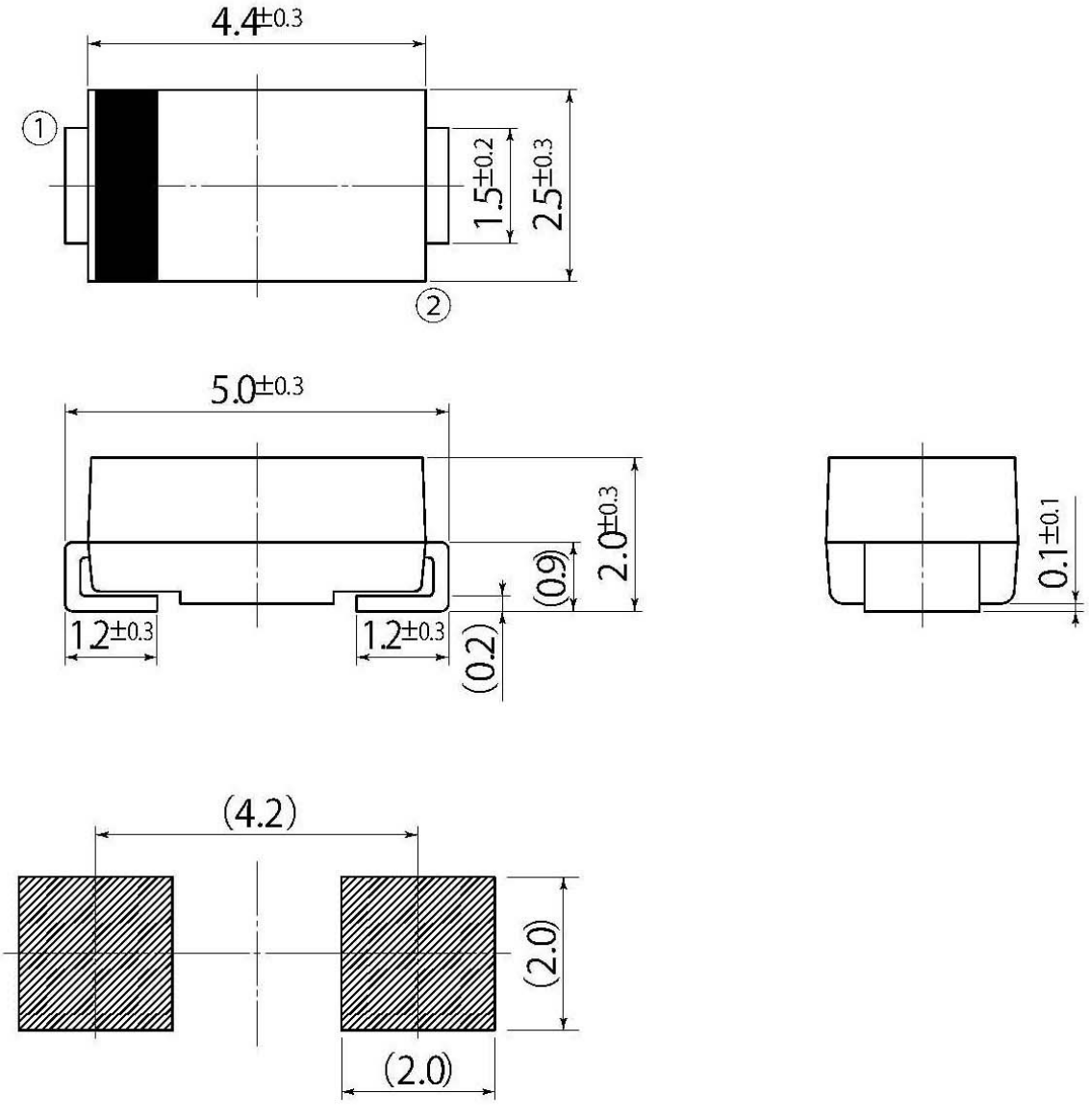
Outline Dimensions

unit:mm

scale: 10/1

B3

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



Referential Soldering Pad

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