G1VL20C

SIDACs / Uni-directional (G1V Series)
170V, 280A

Feature

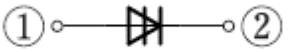
・Uni-directional
・Miniaturized compared to a K1V series
・For pulse generation, DC power with switching operation
・A reliable product with a track record, developed for many applications
・Pb free terminal
・RoHS:Yes

OUTLINE

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



Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-40 to 125	℃
Junction temperature	Tj		-40 to 125	℃
Maximum off-state voltage	$V_{DRM(A)}$		170	V
RMS on-state current	I_T	Tl=98°C, 50Hz sine wave, θ=180˚	1	A
Pulse on-state current	I_{TRM}	Ta=25°C, pulse width 10μs, 5Hz sine wave	280	A
Pulse on-state current	I_{TRM}	Ta=25°C, pulse width 10μs, 60Hz sine wave	120	A
Critical rate of rise of on-state current	di_T/dt		150	A/μs

※ ：See the original Specifications

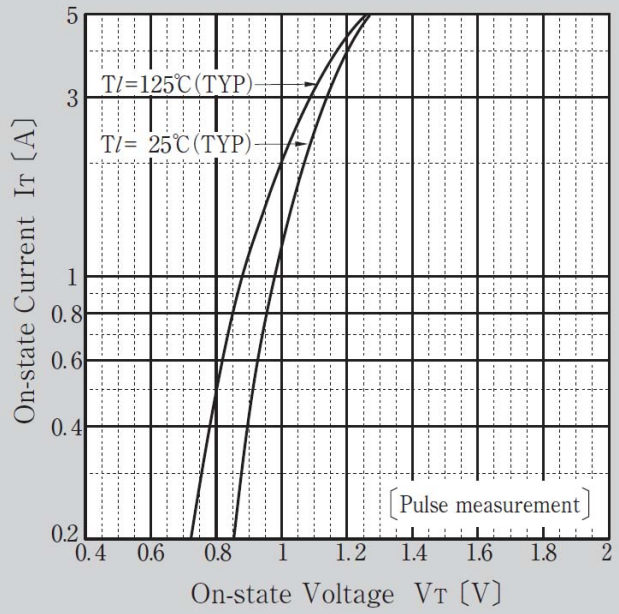
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakover voltage	$V_{BO(A)}$	Pulse measurement, dv/dt=4V/ms	190		210	V
Off-state current	$I_{DRM(A)}$	VD=170V			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

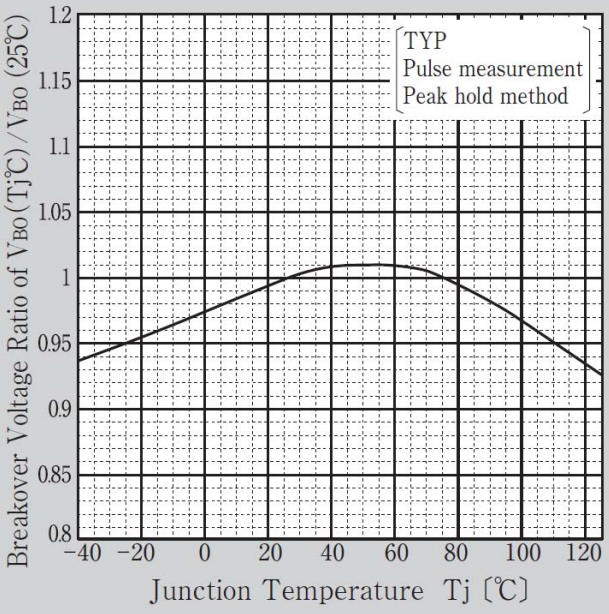
※ ：See the original Specifications

CHARACTERISTIC DIAGRAMS

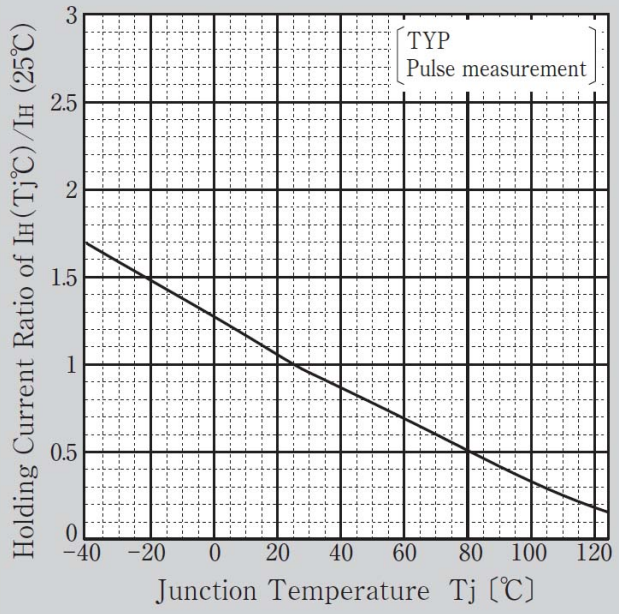
オン電圧－オン電流
On-state Voltage vs On-state Current



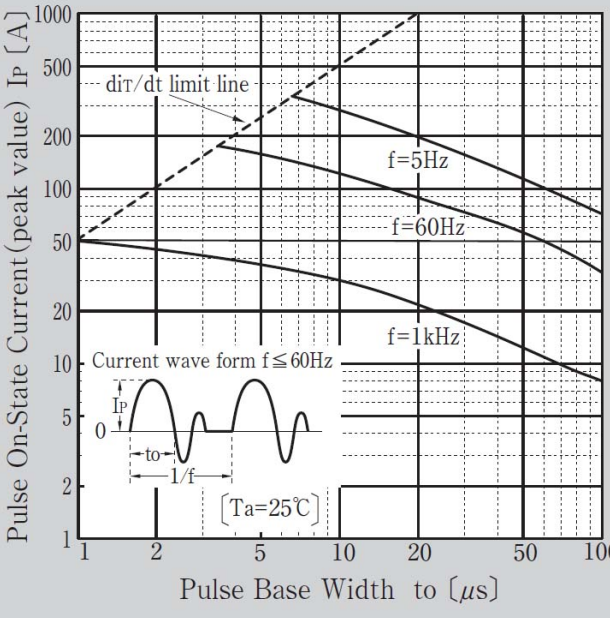
V_{BO}－Tj 特性
Breakover Voltage vs Junction Temperature



I_H－Tj 特性
Holding Current vs Junction Temperature

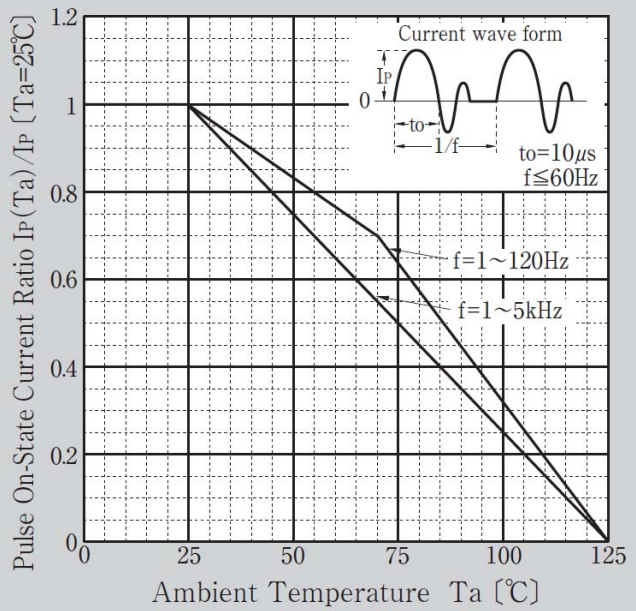


せん頭パルス電流
Pulse On-state Current Rating (I_{TRM})



ITRM ディレーティング

Pulse On-state Current Derating (ITRM)

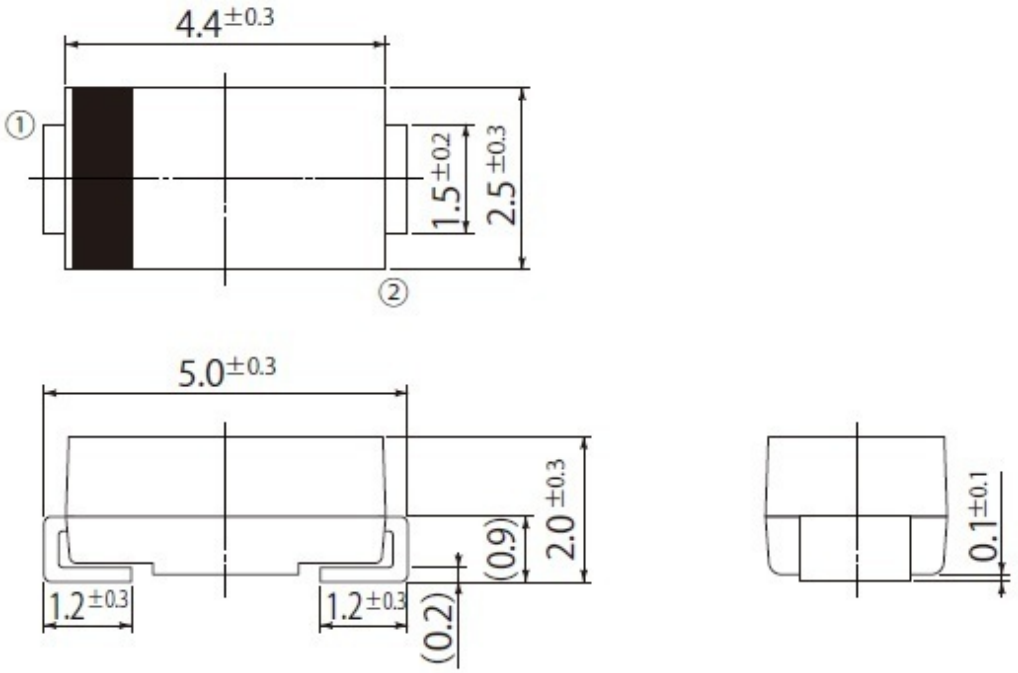


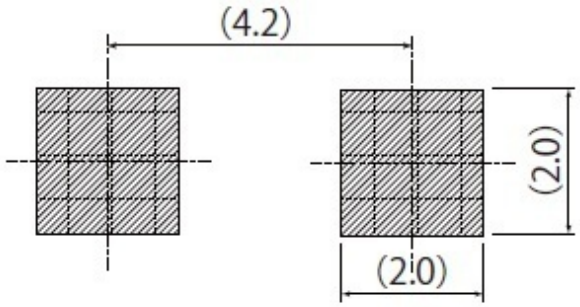
Outline Dimensions

unit:mm

B3

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





Referential Soldering Pad

Fig. B3-3 ① ② 

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

- 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 (2026.08)

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   【Specific applications】
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