

G1VL20C  
SIDACs / Uni-directional (G1V Series)  
170V, 280A

Feature

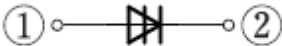
- Uni-directional
- Miniaturized compared to a K1V series
- For pulse generation, DC power with switching operation
- A reliable product with a track record, developed for many applications
- Pb free terminal
- RoHS:Yes

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	°C
Junction temperature	Tj		125	°C
Maximum off-state voltage	V <sub>DRM(A)</sub>		170	V
RMS on-state current	I <sub>T</sub>	Tl=98°C, 50Hz sine wave, θ=180°	1	A
Pulse on-state current	I <sub>TRM</sub>	Ta=25°C, pulse width 10μs, 5Hz sine wave	280	A
Pulse on-state current	I <sub>TRM</sub>	Ta=25°C, pulse width 10μs, 60Hz sine wave	120	A
Critical rate of rise of on-state current	di <sub>T</sub> /dt		150	A/μs

※ :See the original Specifications

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

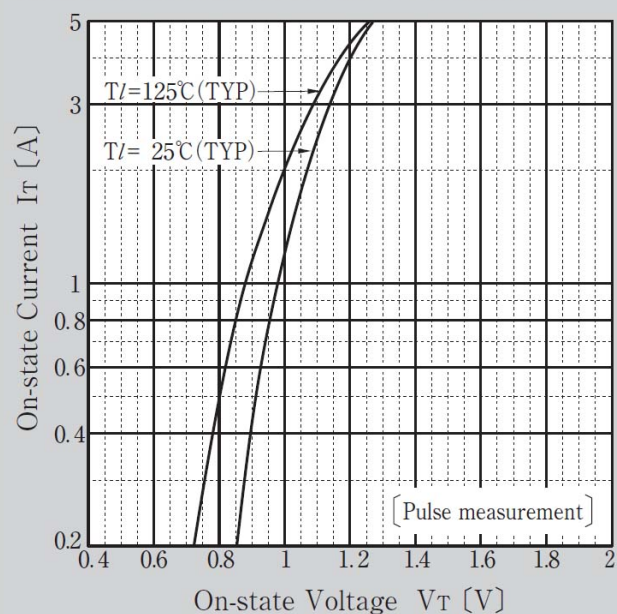
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakover voltage	$V_{BO(A)}$	Pulse measurement, $dv/dt=4V/ms$	190		210	V
Off-state current	$I_{DRM(A)}$	$V_D=170V$			10	$\mu A$
Breakover current	$I_{BO(A)}$	$V_{BO}=0.5V$			0.5	mA
Holding current	$I_{H(A)}$				60	mA
Holding current	$I_{H(K)}$				60	mA
On-state voltage	$V_{T(A)}$	$I_T=1A$			1.5	V
On-state voltage	$V_{T(K)}$	$I_T=1A$			1.5	V
Switching resistance	$R_{S(A)}$		0.1			$k\Omega$
Thermal resistance	$R_{th(j-l)}$	Junction to lead			23	$^{\circ}C/W$

※ : See the original Specifications

## CHARACTERISTIC DIAGRAMS

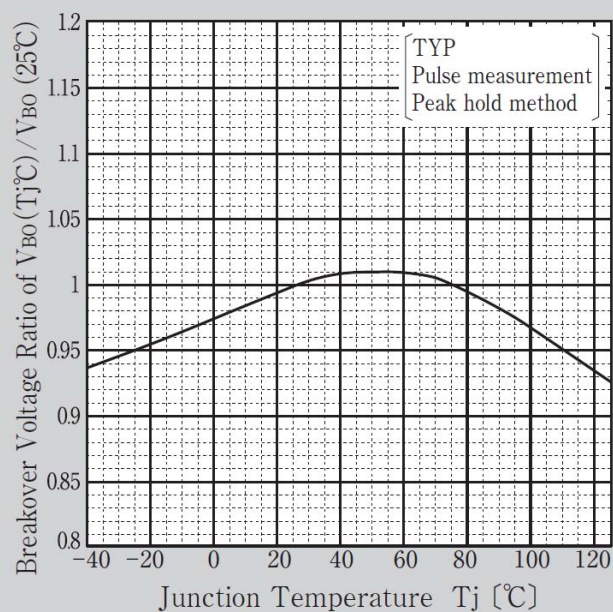
### オン電圧 - オン電流

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



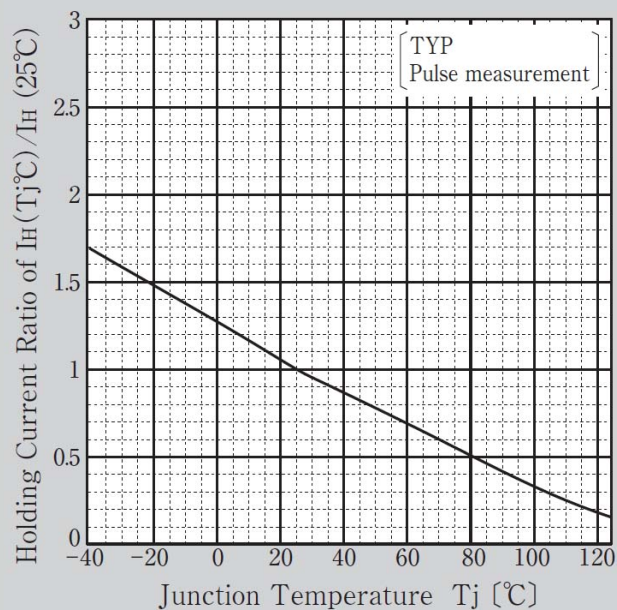
### $V_{BO}-T_J$ 特性

#### Breakover Voltage vs Junction Temperature



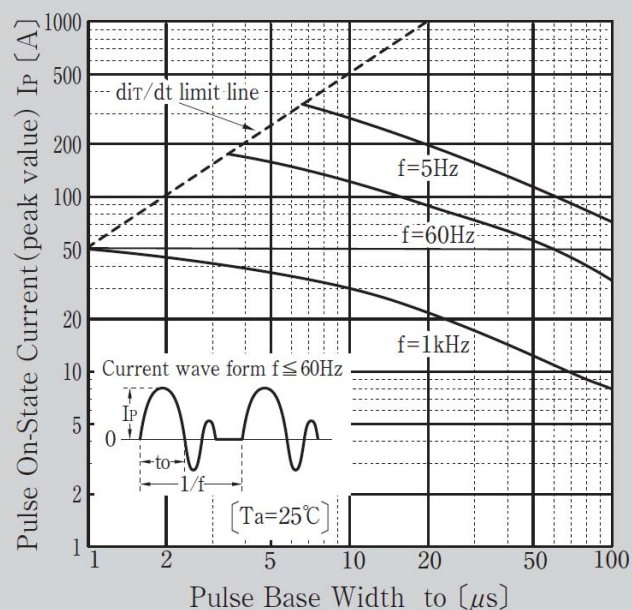
### $I_H-T_J$ 特性

#### Holding Current vs Junction Temperature



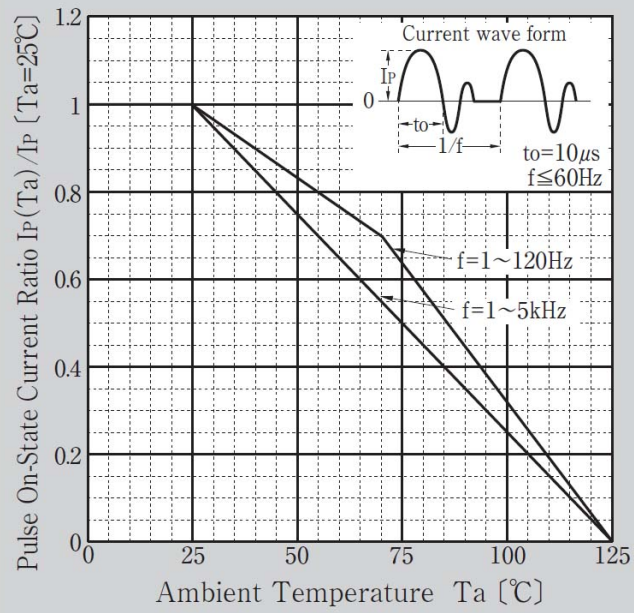
### せん頭パルス電流

#### Pulse On-state Current Rating ( $I_{TRM}$ )



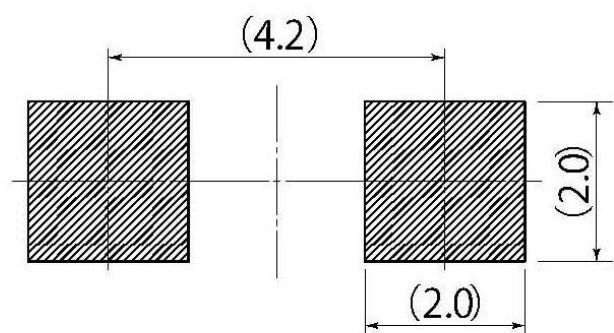
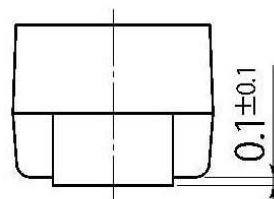
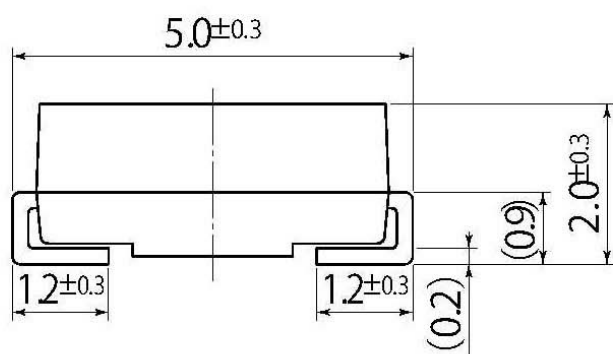
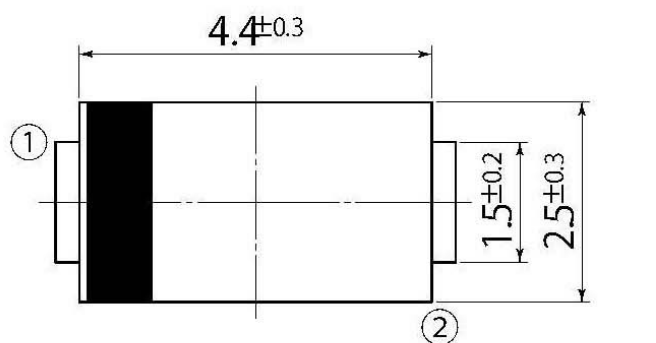
# $I_{TRM}$ デイレーティング

## Pulse On-state Current Derating ( $I_{TRM}$ )



B3

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



Referential Soldering Pad

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

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  - 【Specific applications】  
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