

# G1VL24C

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

Feature

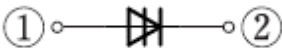
- Uni-directional
- Miniaturized compared to a K1V series
- For pulse generation, DC power with switching operation
- A reliable product with a track record, developed for many applications
- Pb free terminal
- RoHS:Yes

OUTLINE

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



Equivalent circuit



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

| Item                                      | Symbol              | Conditions                               | Ratings    | Unit |
|-------------------------------------------|---------------------|------------------------------------------|------------|------|
| Storage temperrature                      | Tstg                |                                          | -40 to 150 | °C   |
| Junction temperature                      | Tj                  |                                          | 150        | °C   |
| Maximum off-state voltage                 | V <sub>DRM(A)</sub> |                                          | 190        | 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    |
| Critical rate of rise of on-state current | di <sub>T</sub> /dt |                                          | 150        | A/μs |

※ :See the original Specifications

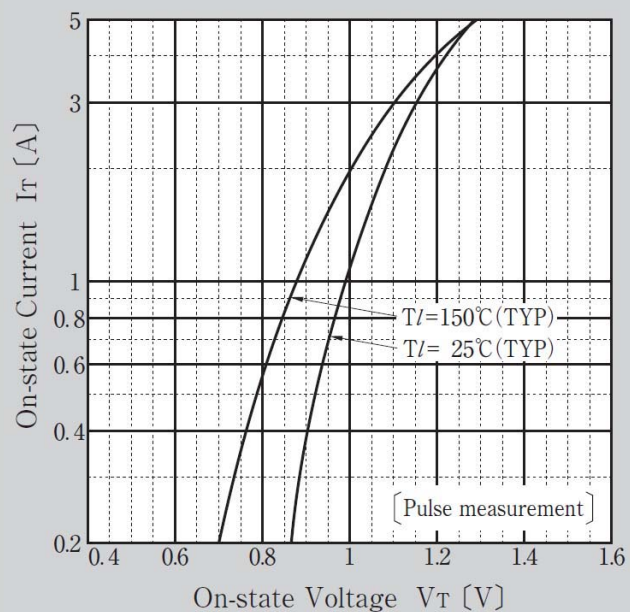
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

| Item                 | Symbol        | Conditions                       | Ratings |     |     | Unit          |
|----------------------|---------------|----------------------------------|---------|-----|-----|---------------|
|                      |               |                                  | MIN     | TYP | MAX |               |
| Breakover voltage    | $V_{BO(A)}$   | Pulse measurement, $dv/dt=4V/ms$ | 230     |     | 250 | V             |
| Off-state current    | $I_{DRM(A)}$  | $V_D=190V$                       |         |     | 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  | $^{\circ}C/W$ |

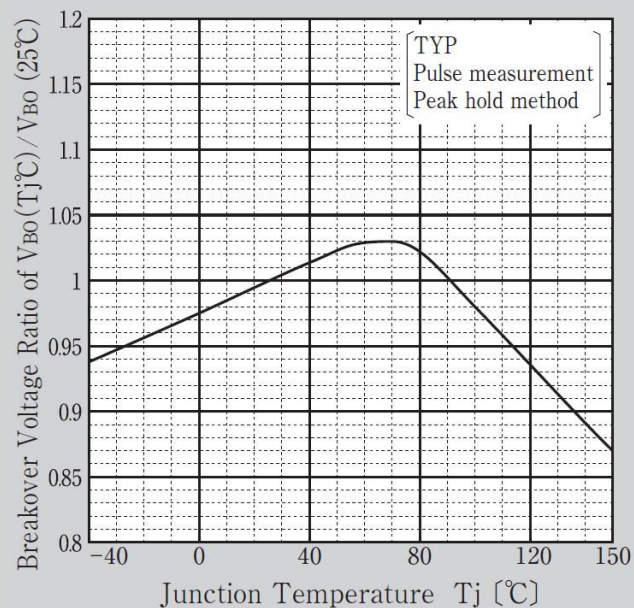
※ : See the original Specifications

## CHARACTERISTIC DIAGRAMS

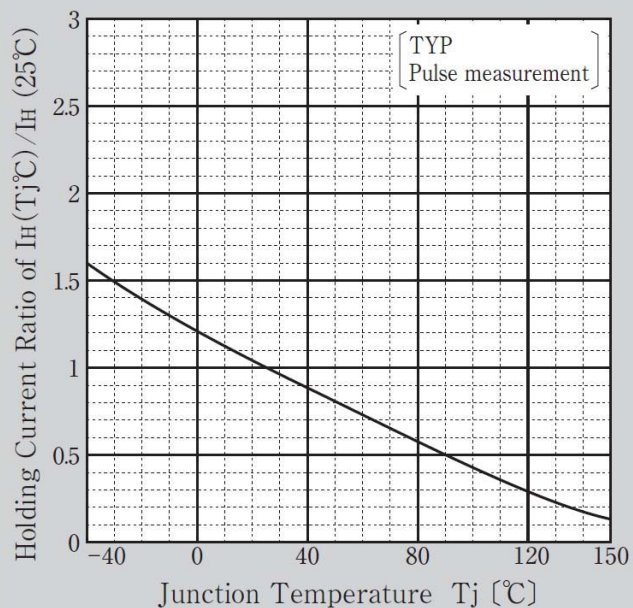
On-state Voltage vs On-state Current



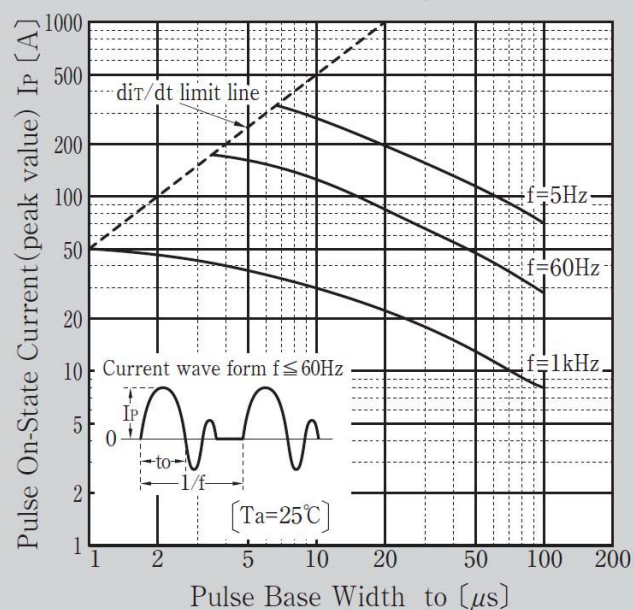
Breakover Voltage vs Junction Temperature



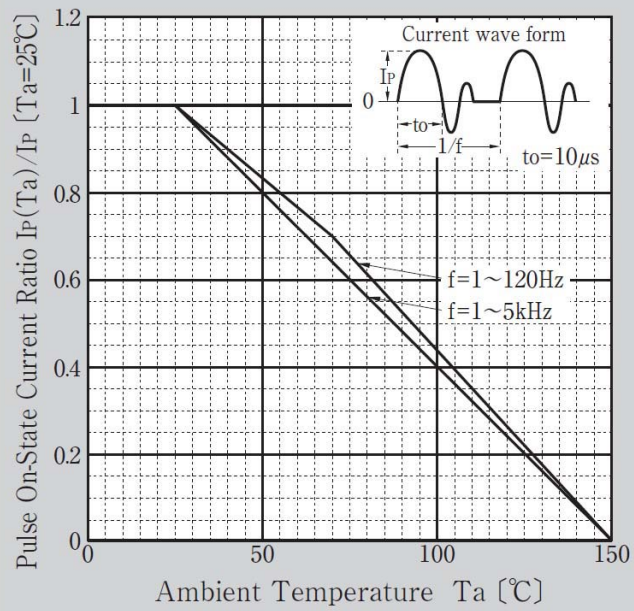
Holding Current vs Junction Temperature



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

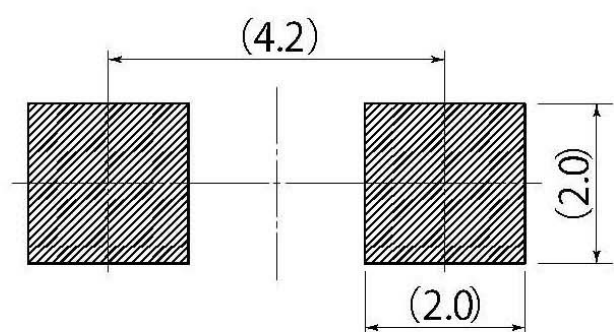
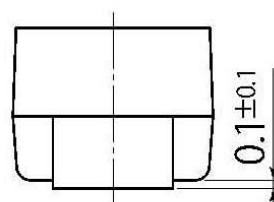
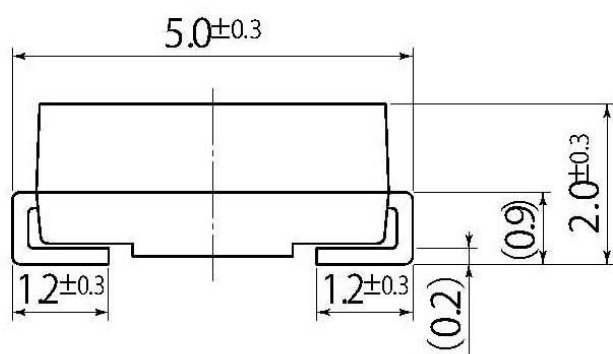
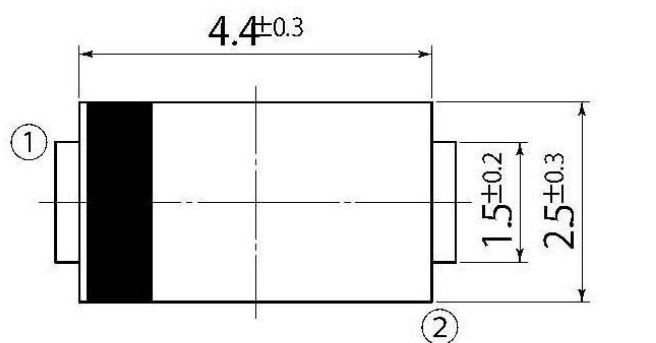


# Pulse On-state Current Derating ( $I_{TRM}$ )



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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