

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

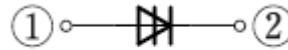
OUTLINE

Package (House Name): 1F

Package (JEDEC Code): DO-214AC



Equivalent circuit



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

| Item | Symbol | Conditions | Ratings | Unit |
|---|---------------------|--|------------|------|
| Storage temperature | T _{stg} | | -40 to 125 | °C |
| Junction temperature | T _j | | 125 | °C |
| Maximum off-state voltage | V _{DRM(A)} | | 190 | 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 |
| Critical rate of rise of on-state current | di _T /dt | | 150 | A/μs |

* : See the original Specifications

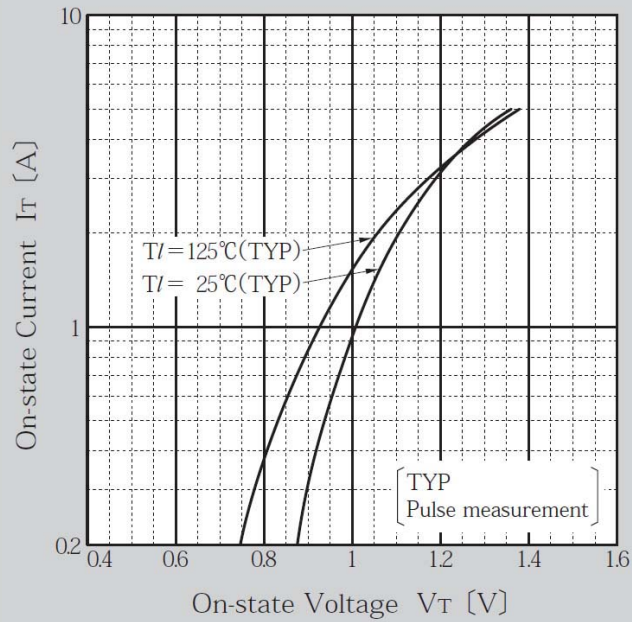
Electrical Characteristics (unless otherwise specified : Tl=25°C)

| 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 | $I_{DRM(A)}$ | $V_D=190V$ | | | 10 | μA |
| 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 | $^{\circ}C/W$ |

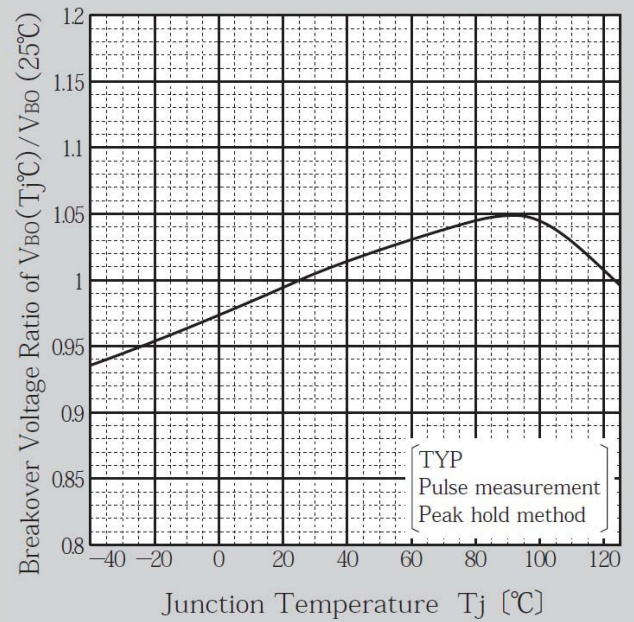
※ : See the original Specifications

CHARACTERISTIC DIAGRAMS

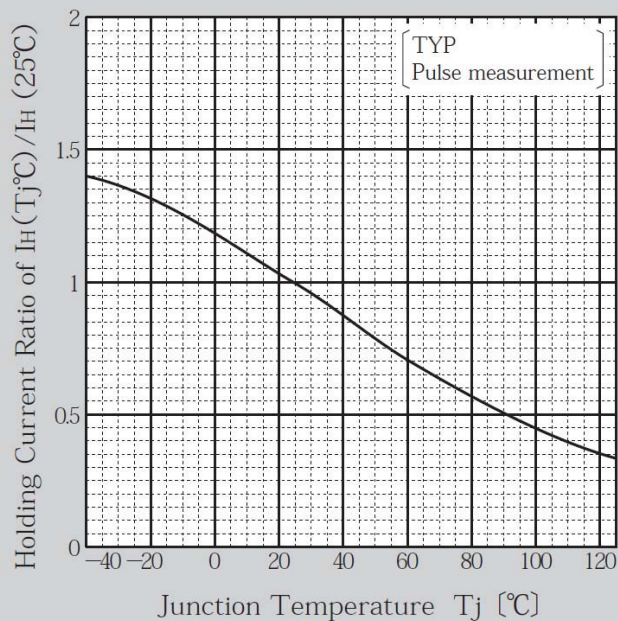
On-state Voltage vs On-state Current



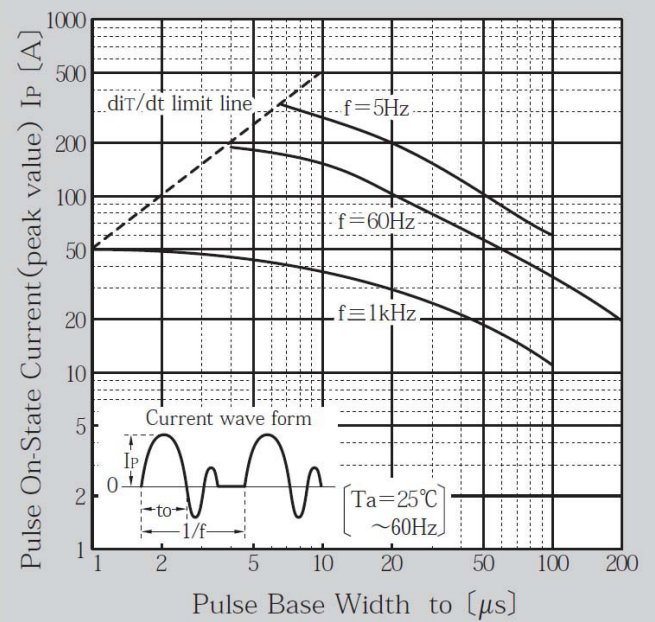
Breakover Voltage vs Junction Temperature



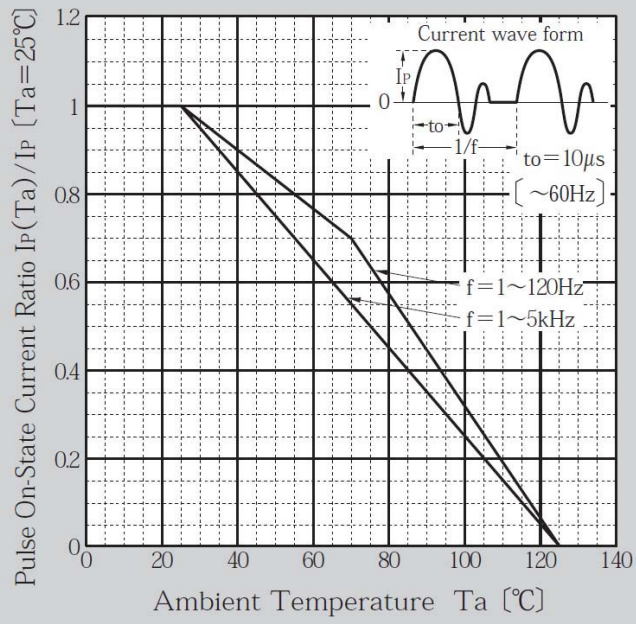
Holding Current vs Junction Temperature



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

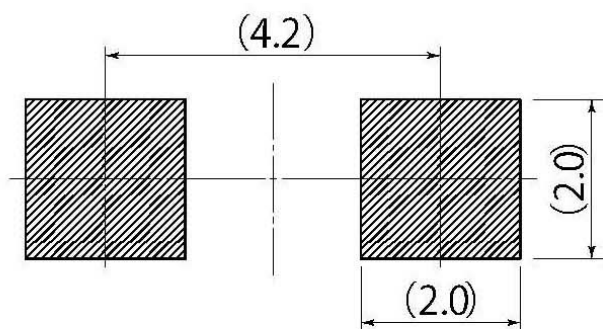
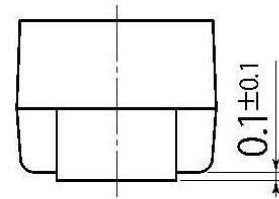
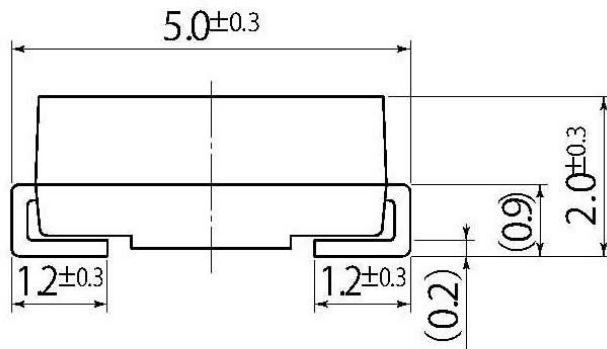
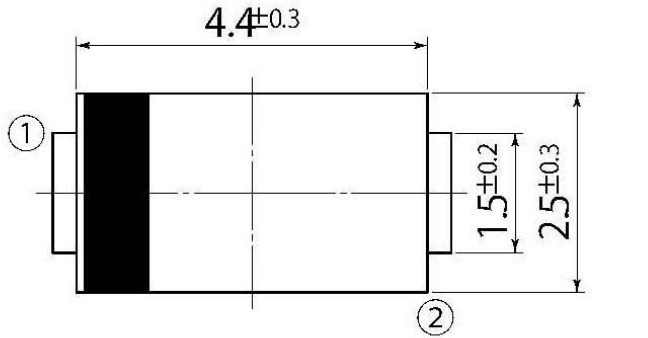


Pulse On-state Current Derating (ITRM)



B3

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



Referential Soldering Pad

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