

# ST02-14G1

TVS

10.0A, 200W

## Feature

- Peak pulse power:200W
- Ultra-small SMD
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

## OUTLINE

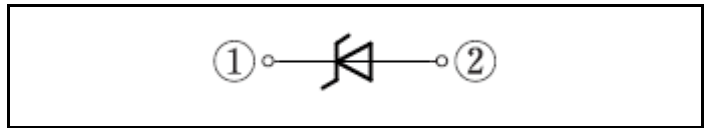
Package (House Name): G1F

Package (JEDEC Code): DO-219AB similar

Package (JEITA Code): SC-109



## Equivalent circuit



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

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-55 to 175	°C
Operating junction temperature	Tj		-55 to 175	°C
Maximum surge reverse current	I <sub>RSM</sub>	10/1000μs, Non-repetitive *	10	A
Maximum surge reverse power	P <sub>RSM</sub>	10/1000μs, Non-repetitive *	200	W
Continuous (direct) reverse voltage	V <sub>R(DC)</sub>		12.8	V

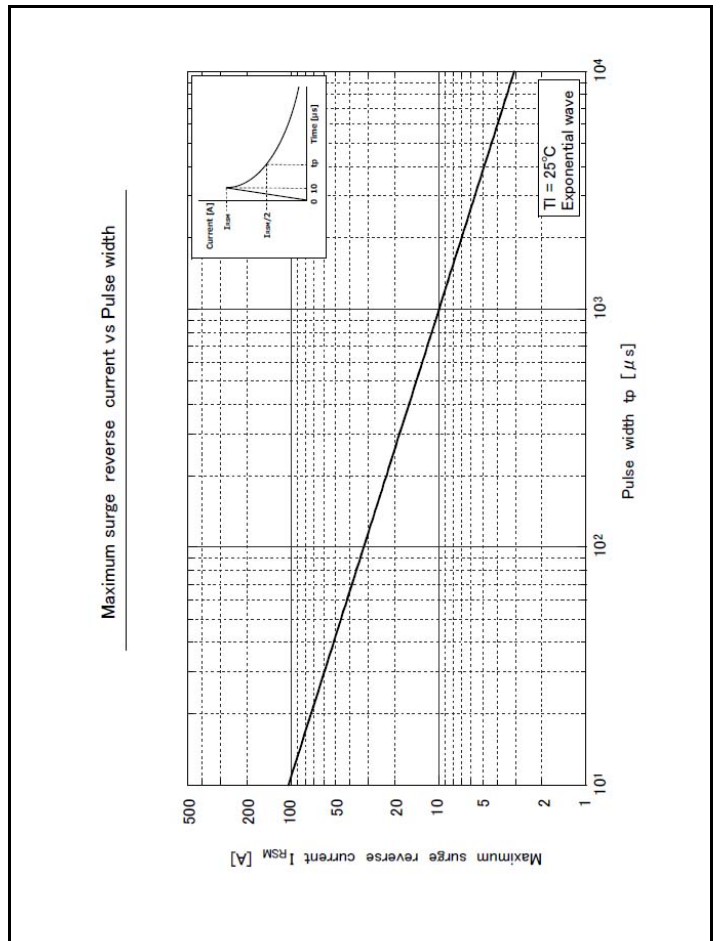
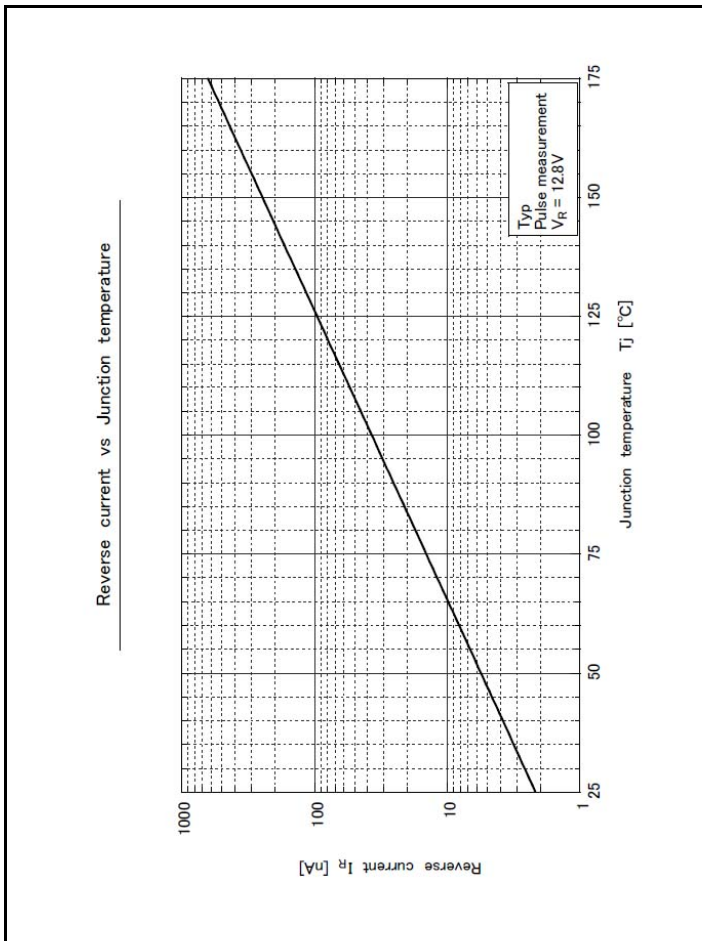
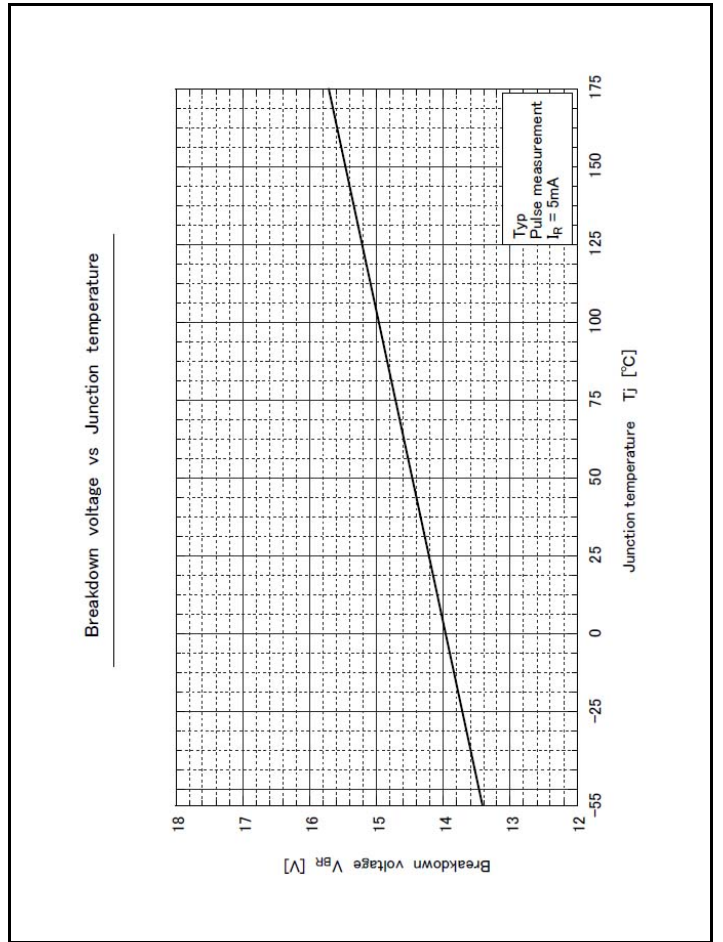
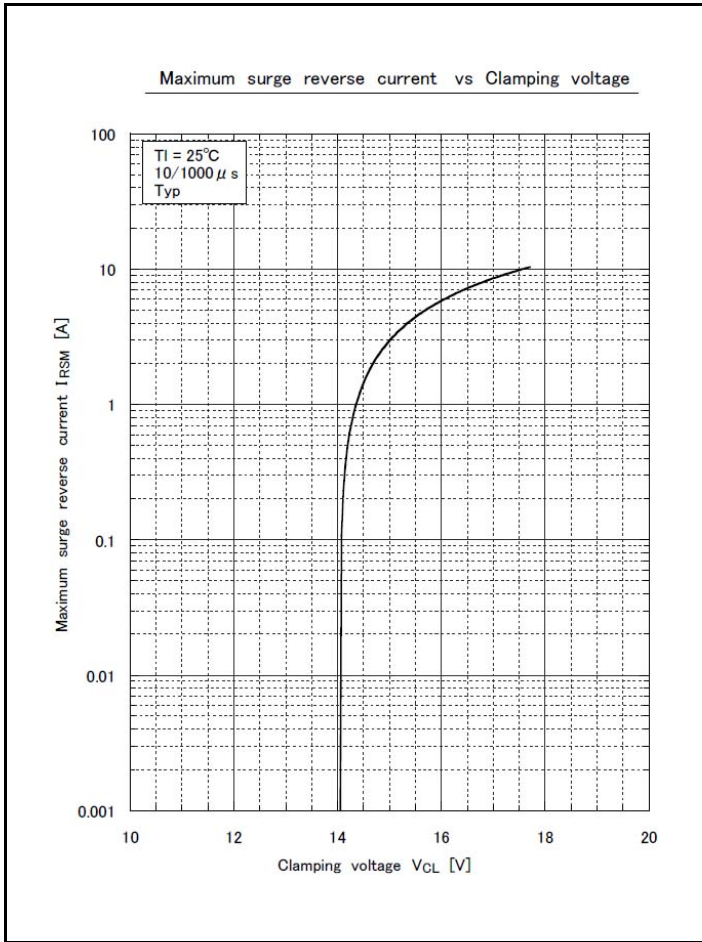
\* :See the original Specifications

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

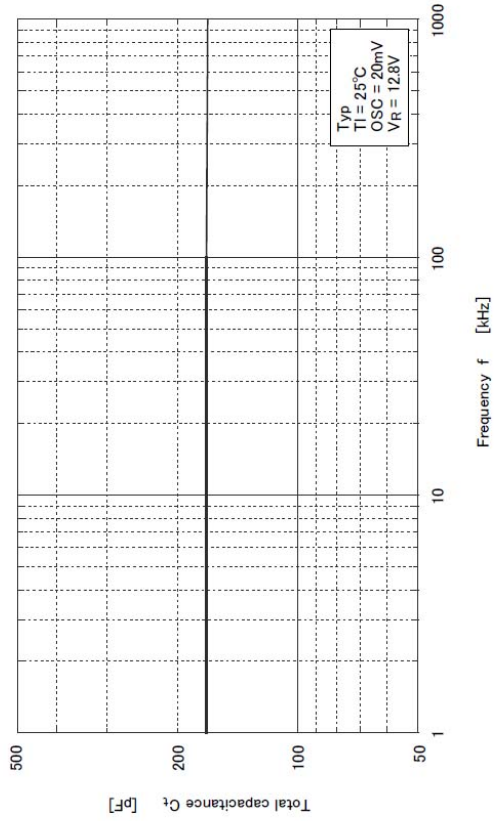
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V <sub>BR</sub>	IR=5mA, Pulse measurement	13.5		15	V
Reverse current	I <sub>R</sub>	VR=12.8V, Pulse measurement			5	μA
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate *			20	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate *			120	°C/W

\* :See the original Specifications

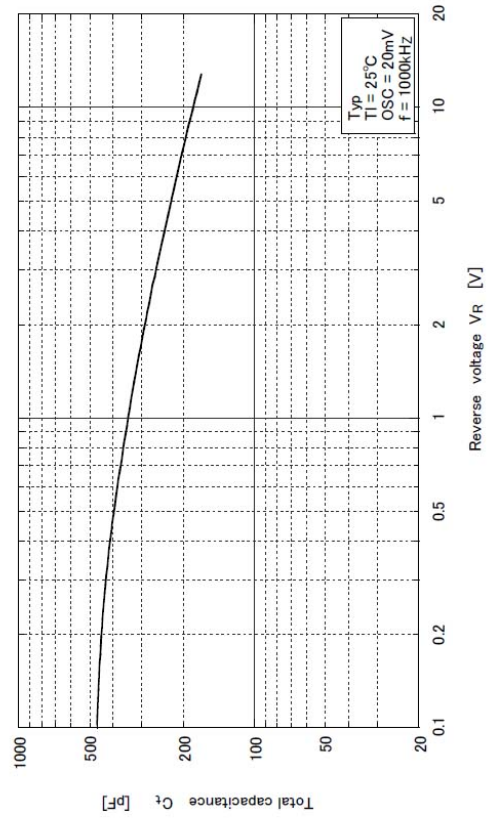
# CHARACTERISTIC DIAGRAMS



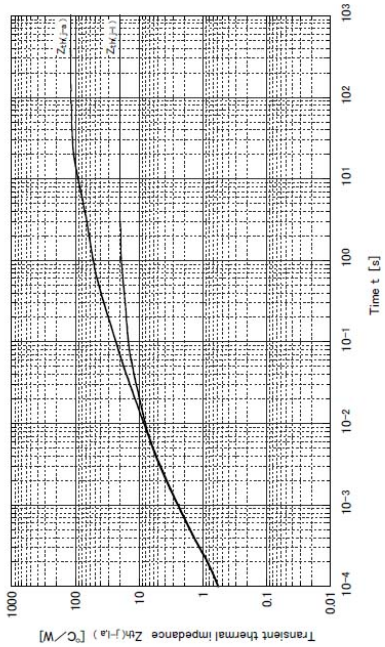
Total capacitance vs Frequency



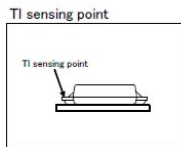
Total capacitance vs Reverse voltage



Transient thermal impedance vs Time

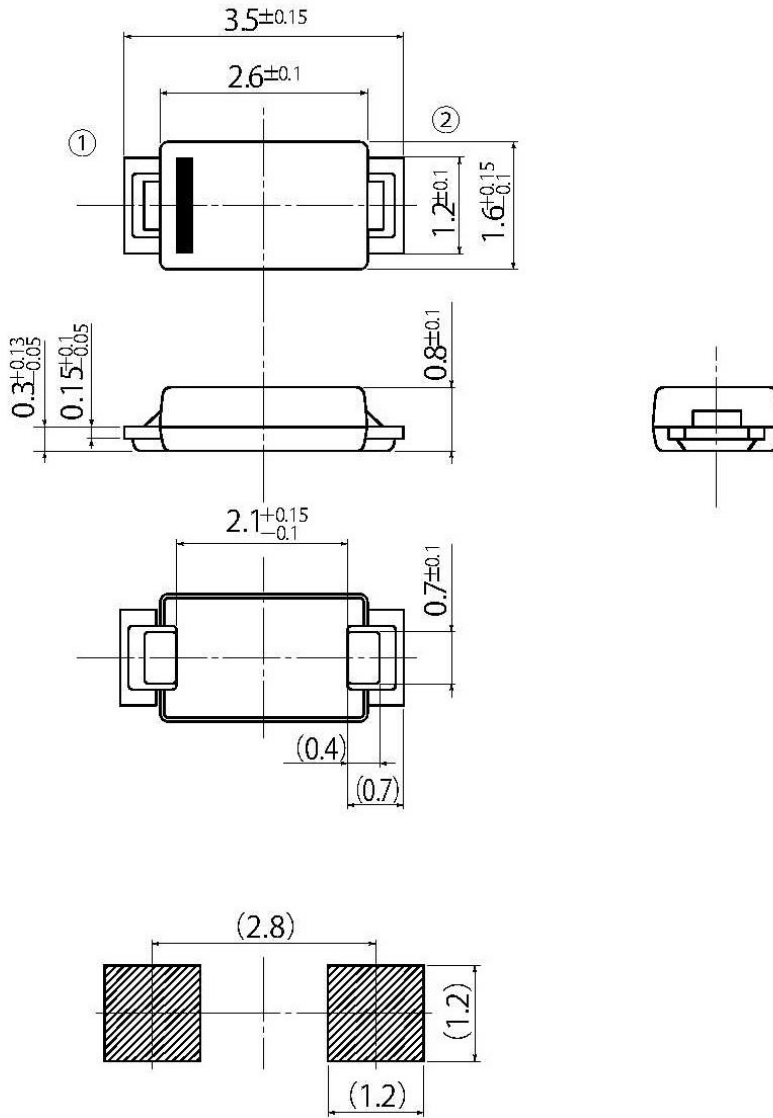


Substrate detail	
Type	Glass-epoxy
Size	1 inch <sup>2</sup>
Thickness	1mm
Conductor thickness	35 μm
Pattern area	100mm <sup>2</sup>



B1

JEDEC Code	DO-219AB similar
JEITA Code	SC-109
House Name	G1F



Referential Soldering Pad

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

## Notes

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  - 【Specific applications】  
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