

ST02-12G1

TVS  
11.2A, 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	IRSM	10/1000μs, Non-repetitive ※	11.2	A
Maximum surge reverse power	PRSM	10/1000μs, Non-repetitive ※	200	W
Continuous (direct) reverse voltage	VR(DC)		9	V

※ :See the original Specifications

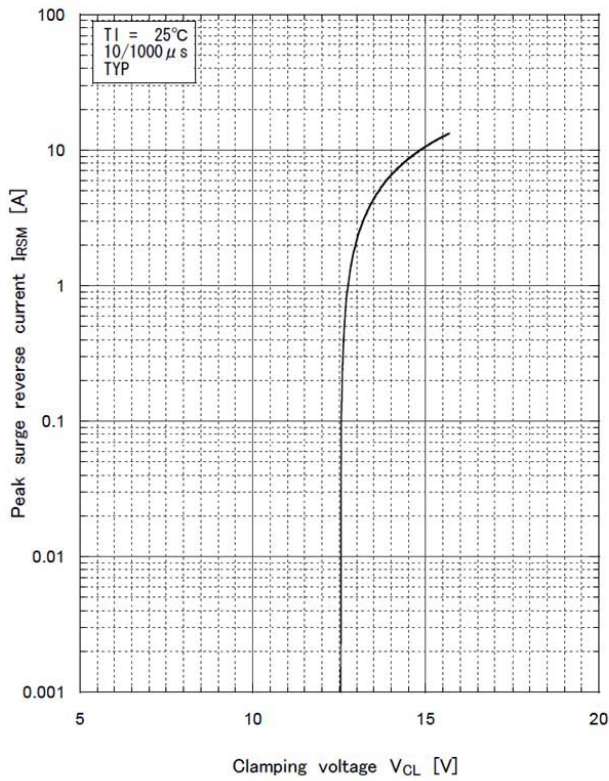
Electrical Characteristics (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	VBR	IR=5mA, Pulse measurement	11.5		13.5	V
Reverse current	IR	VR=9.0V, 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

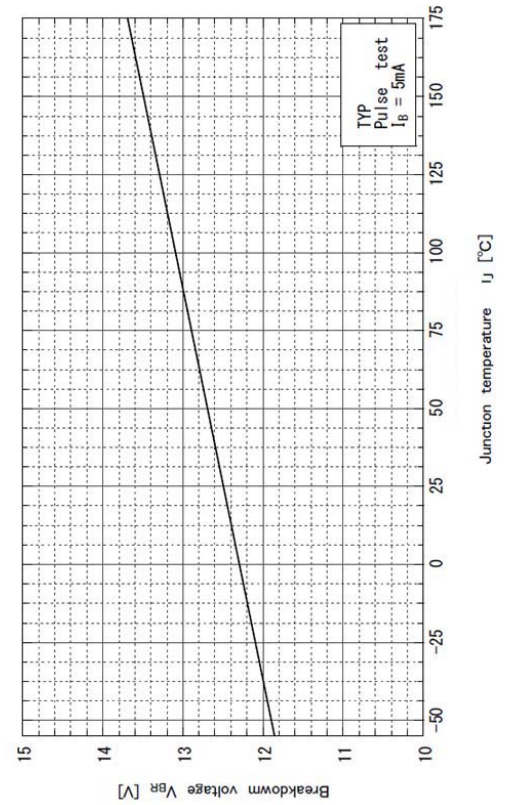
※ :See the original Specifications

# CHARACTERISTIC DIAGRAMS

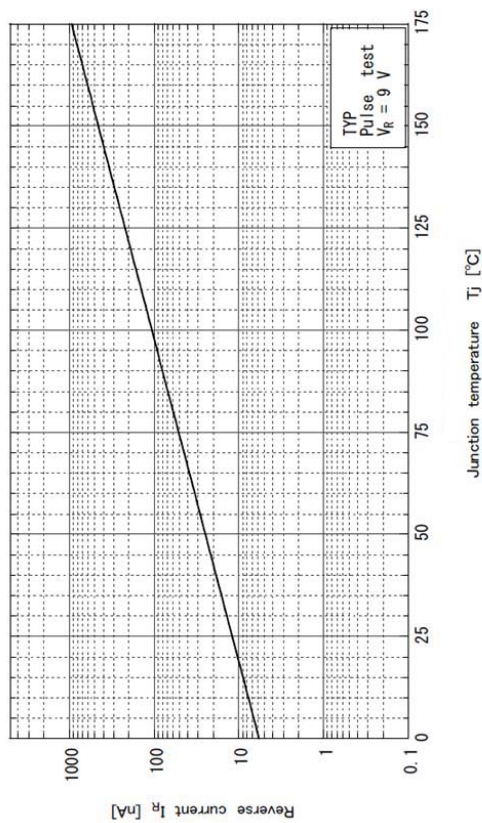
Peak surge reverse current vs Clamping voltage



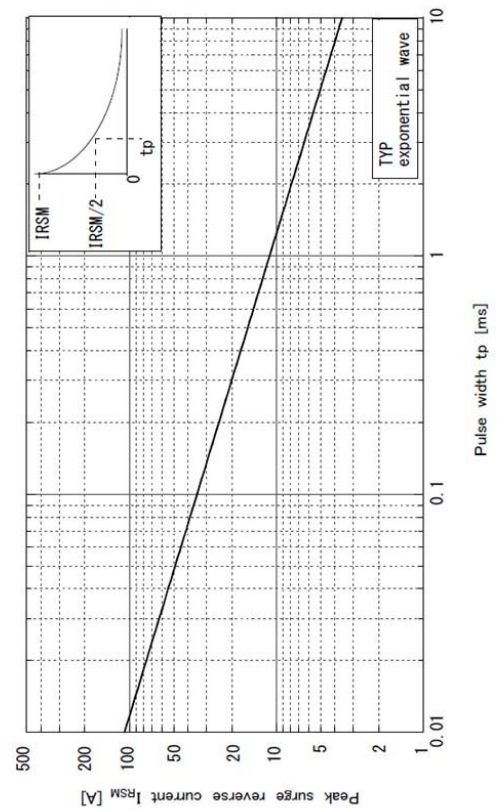
Breakdown voltage vs Junction temperature

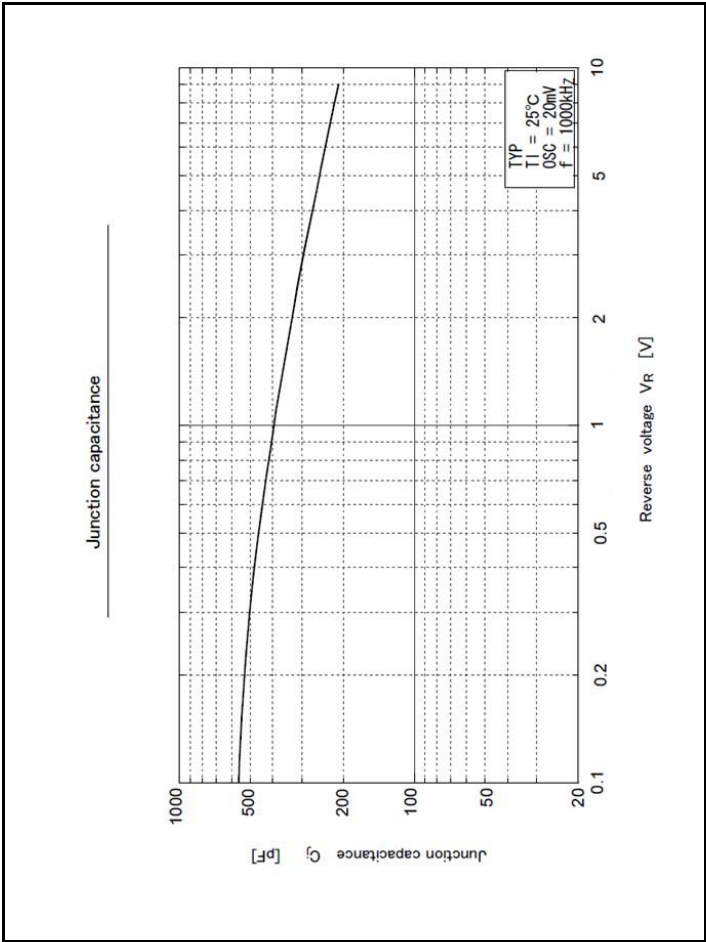
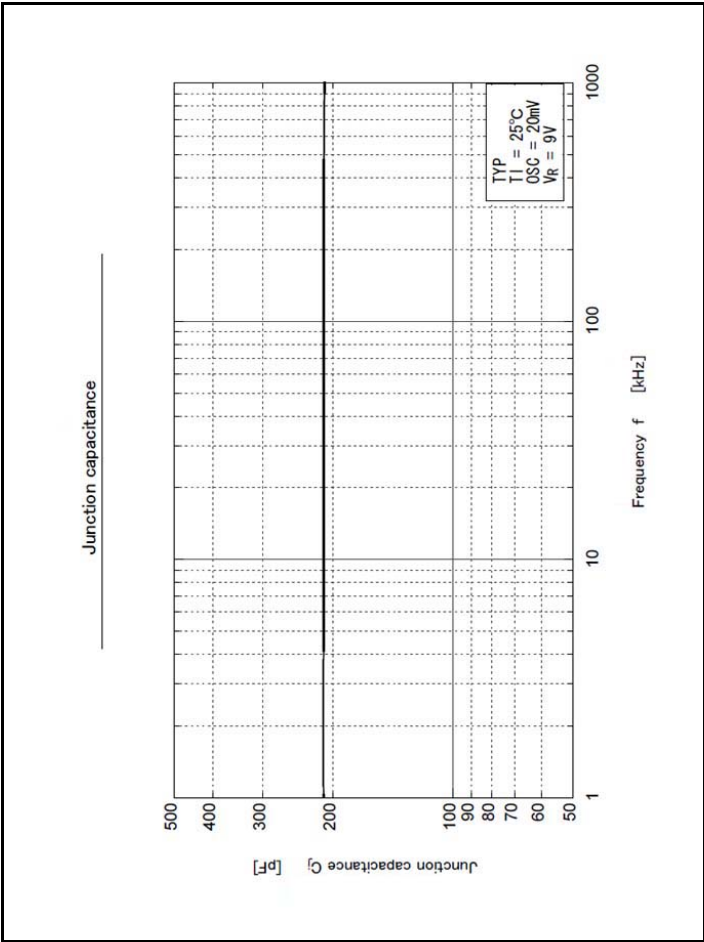
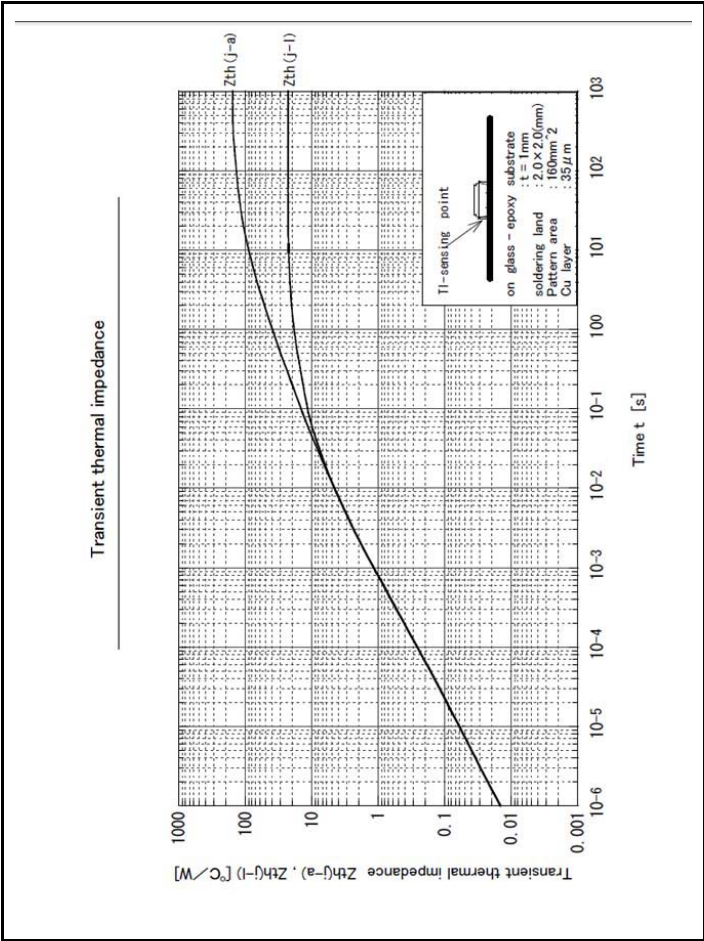


Reverse current vs junction temperature



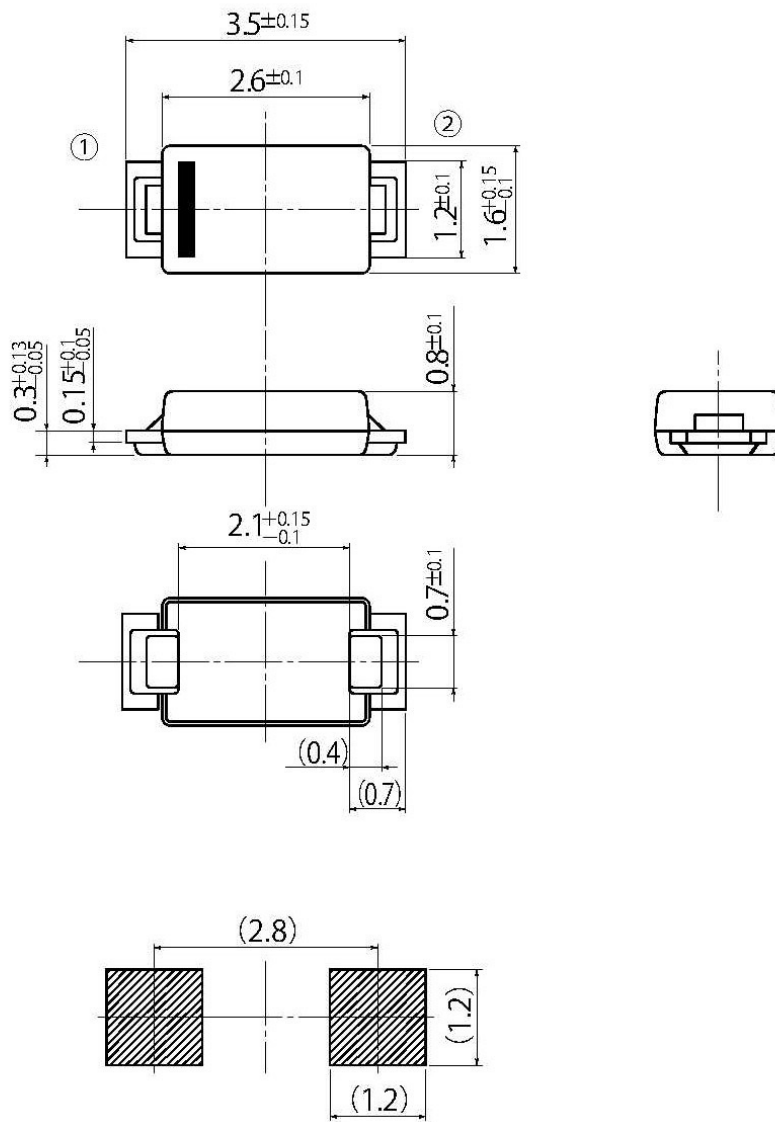
Peak surge reverse current





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.

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