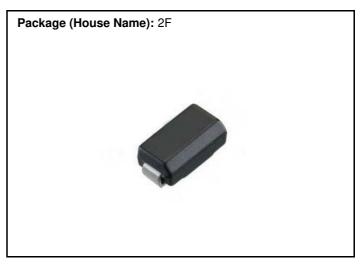
# ST20-30F2

TVS 50A, 2000W

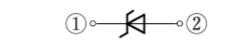
## Feature

- Peak pulse power:2000W
- SMD
- · Available for automotive use
- Pb free terminal
- RoHS:Yes

## OUTLINE



# Equivalent circuit



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

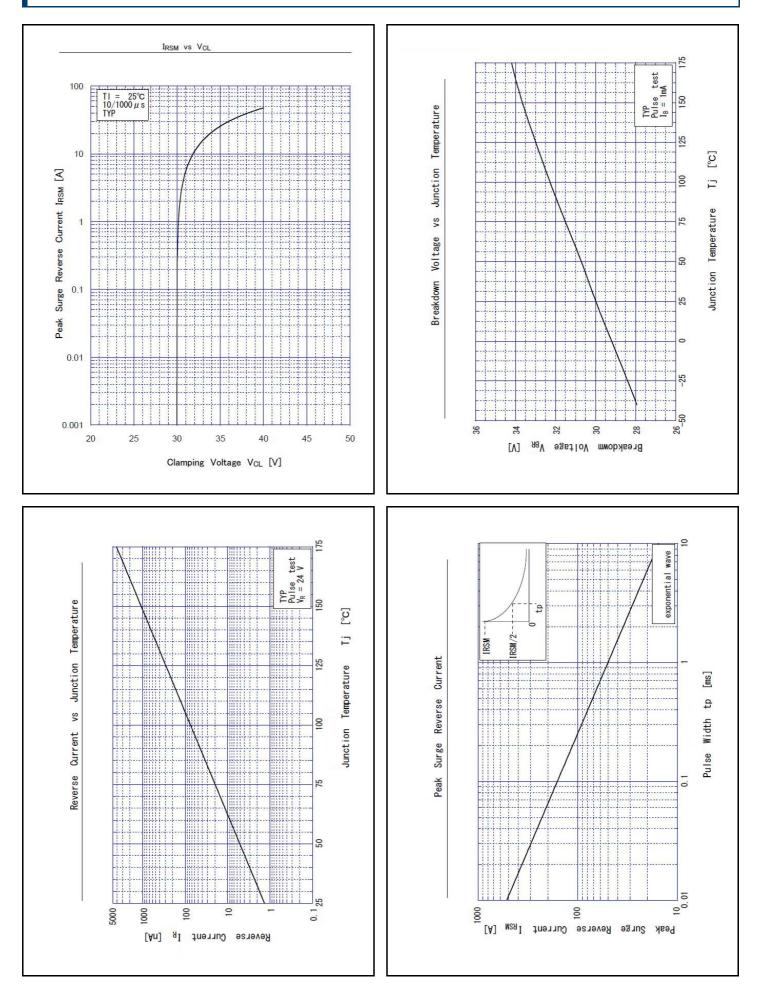
Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-55 to 175	°C
Operating junction temperature	Tj		175	°C
Maximum surge reverse current	I <sub>RSM</sub>	10/1000µs, Non-repetitive	50	А
Maximum surge reverse power	P <sub>RSM</sub>	10/1000µs, Non-repetitive	2000	W
Continuous (direct) reverse voltage	V <sub>R(DC)</sub>		24	V

#### \* : See the original Specifications

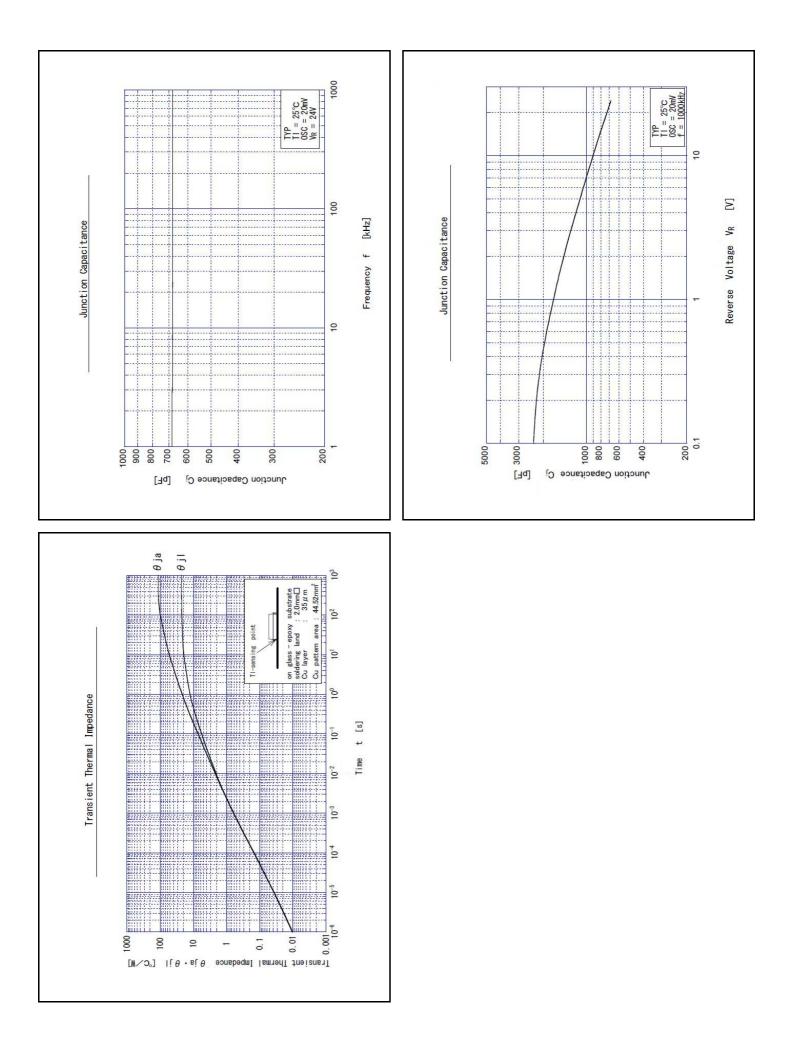
Electrical Characteristics (unless otherwise specified : TI=25°C)								
Item	Symbol	Conditions	Ratings			Unit		
			MIN	ТҮР	MAX			
Breakdown voltage	V <sub>BR</sub>	IR=1mA	28	30	32	V		
Reverse current	I <sub>R</sub>	VR=24V, Pulse measurement			5	μA		
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate *			23	°C/W		
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate *			115	°C/W		
Restriction voltage	V <sub>CL</sub>	10/1000μs, Ipp=50A			40	V		
Temperature coefficient	rz				0.12	%/°C		

\* : See the original Specifications

# **CHARACTERISTIC DIAGRAMS**



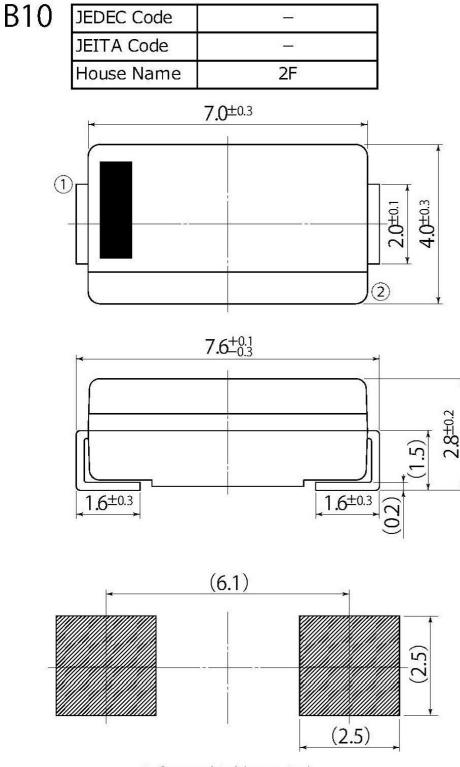
2/5



unit:mm

0.1±0.1

scale: 10/1



**Referential Soldering Pad** 

Optimize soldering pad to the board design and soldering condition.

C 0.8

## Notes

- 1. If you wish to use any such product, please be sure to refer to the specifications issued by Shindengen.
- 2. All products described or contained herein are designed with a quality level intended for use in standard applications requiring an ordinary level of reliability. If these products are to be used in equipment or devices for special or specific applications requiring an extremely high grade of quality or reliability in which failures or malfunctions of products may directly affect human life or health, a local Shindengen office must be contacted in advance to confirm that the intended use of the product is appropriate. Shindengen products are grouped into the following three applications according the quality grade.

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#### [Special applications]

Transportation equipment (vehicles, ships, etc.), trunk-line communication equipment, traffic signal control systems, antidisaster/crime systems, safety equipment, medical equipment, etc.

#### [Specific applications]

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