ShinDengen

ST20-47F2

TVS

31A, 1700W

Feature

- Peak pulse power:1700W
- SMD
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): 2F

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_{RSM}	10/1000μs, Non-repetitive ※	31	A
Maximum surge reverse power	P_{RSM}	10/1000μs, Non-repetitive ※	1700	W
Continuous (direct) reverse voltage	$V_{R(DC)}$		37	V

※ :See the original Specifications

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

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V_{BR}	IR=1mA	42	47	52	V
Reverse current	I_R	VR=37V, 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
Temperature coefficient	rz				0.12	%/°C

※ :See the original Specifications

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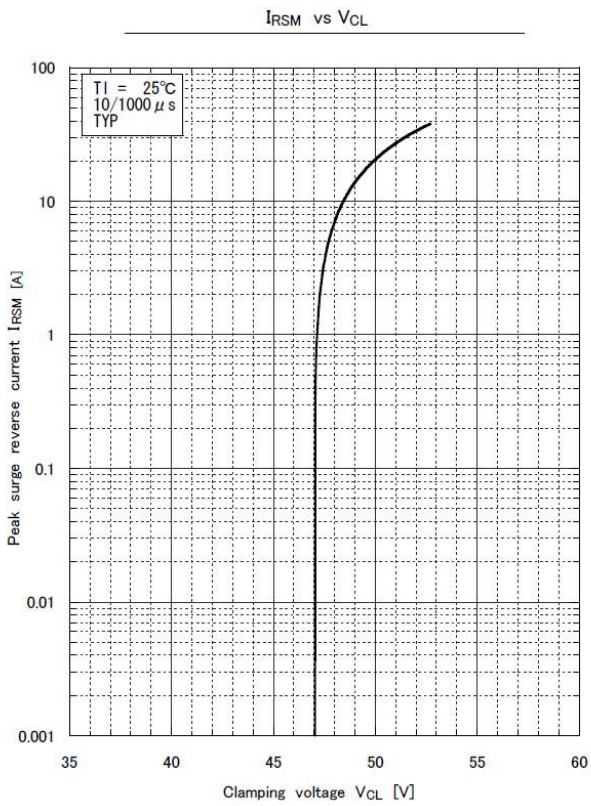
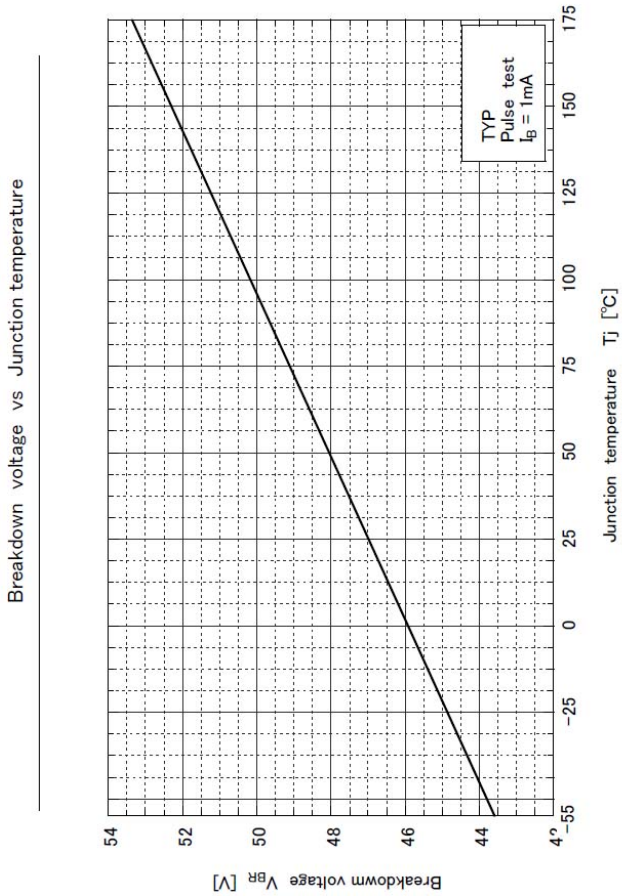
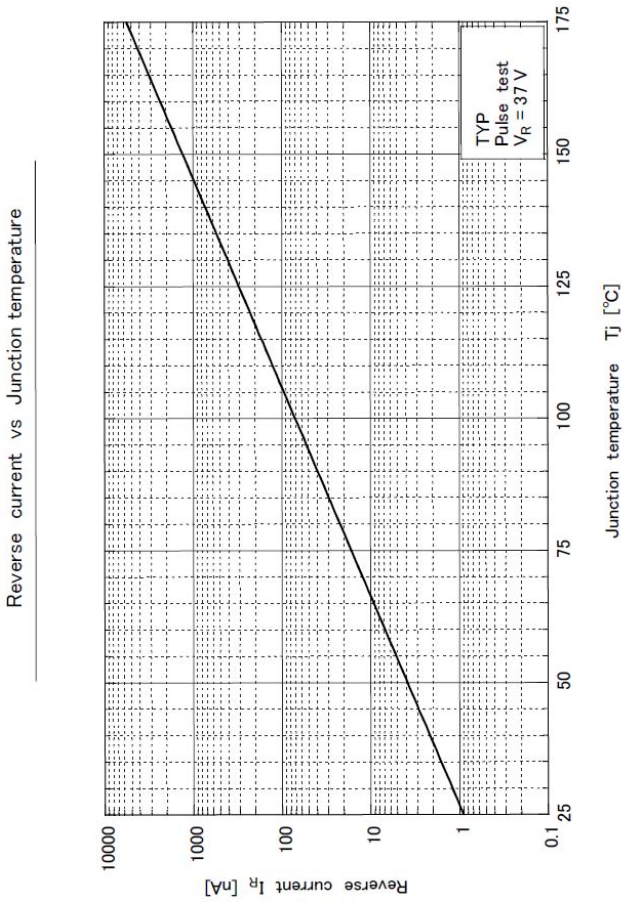
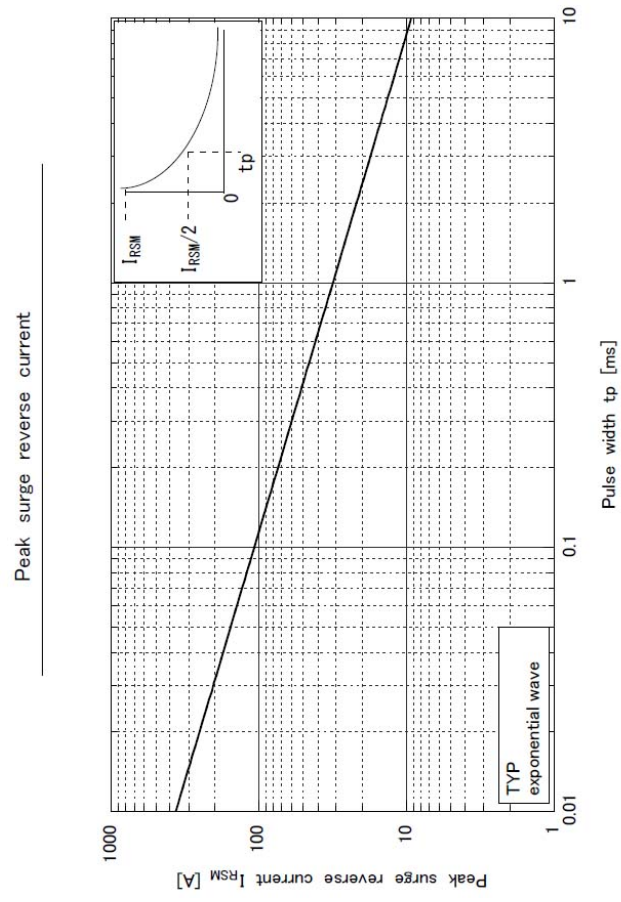
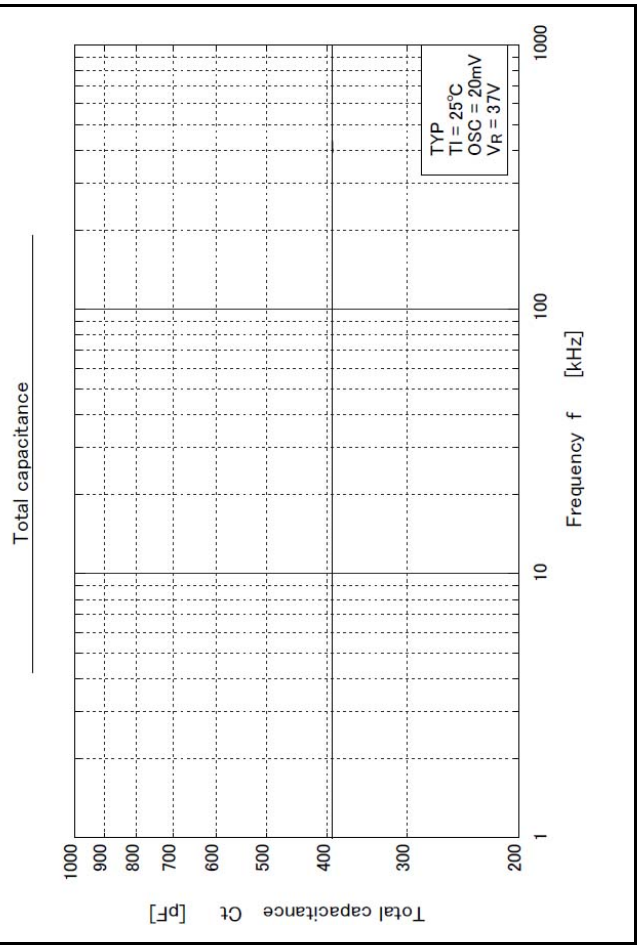
CHARACTERISTIC DIAGRAMS

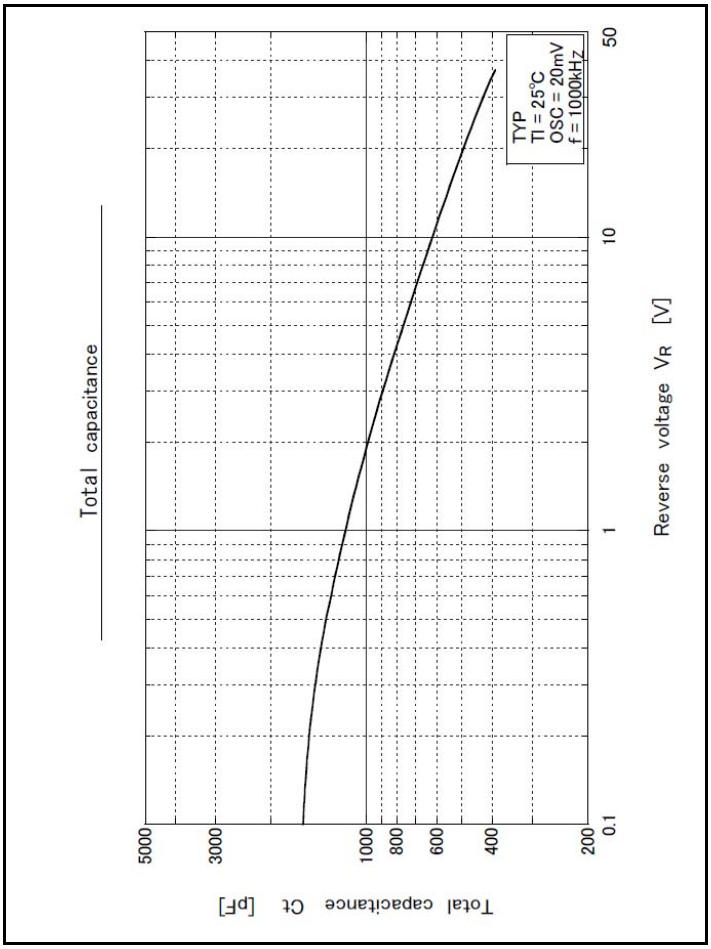


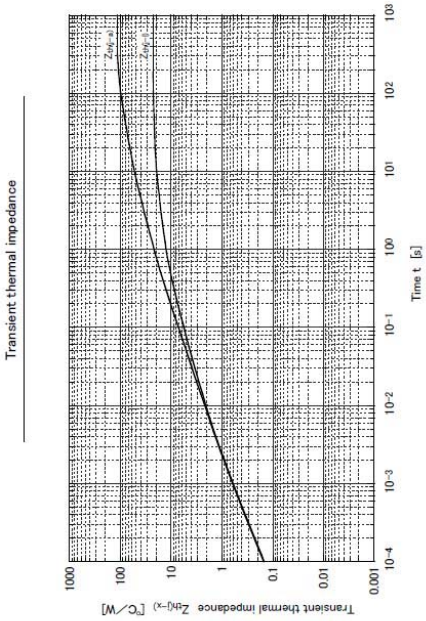








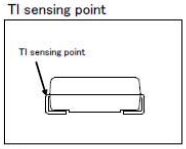




Substrate detail

Type	Glass-epoxy
Size	1inch²
Thickness	1mm
Conductor thickness	35μm
Pattern area	44.5mm²

TI sensing point



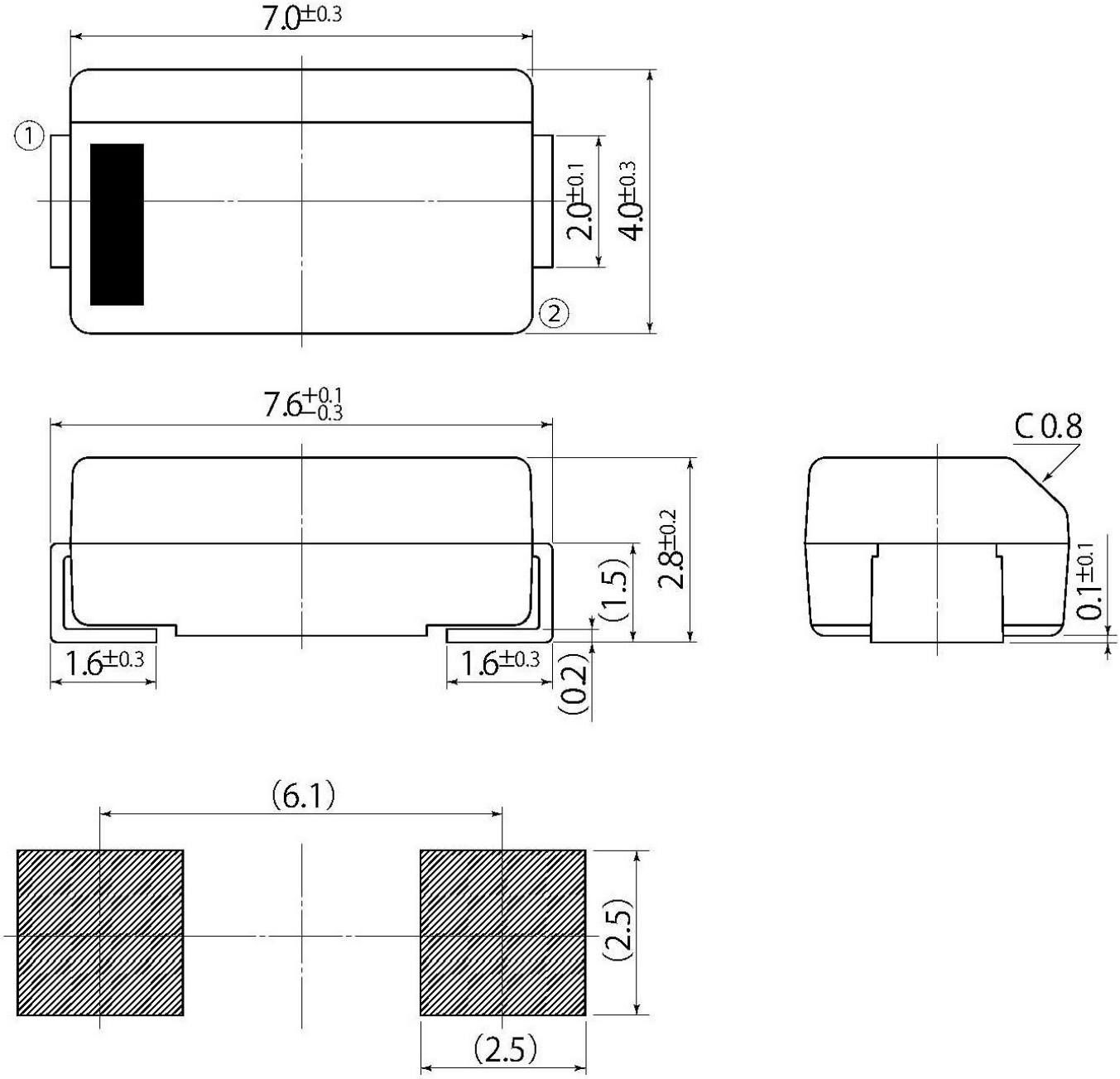
Outline Dimensions

unit:mm

scale: 10/1

B9

JEDEC Code	–
JEITA Code	–
House Name	2F



Referential Soldering Pad

・Optimize soldering pad to the board design and soldering condi tion.

Notes

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