

ST20-36F2

TVS

40A, 2000W

Feature

- Peak pulse power:2000W
- SMD
- Available for automotive use
- 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	T _{stg}		-55 to 175	°C
Operating junction temperature	T _j		-55 to 175	°C
Maximum surge reverse current	I _{RSM}	10/1000μs, Non-repetitive, Exponential wave ※	40	A
Maximum surge reverse power	P _{RSM}	10/1000μs, Non-repetitive	2000	W
Continuous (direct) reverse voltage	V _{R(DC)}		27	V

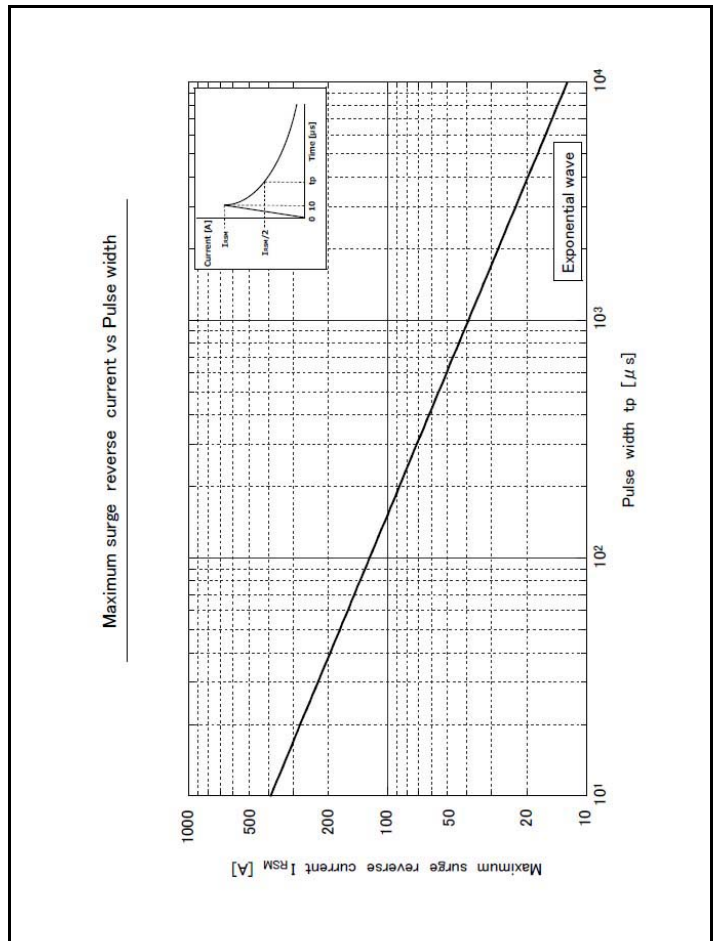
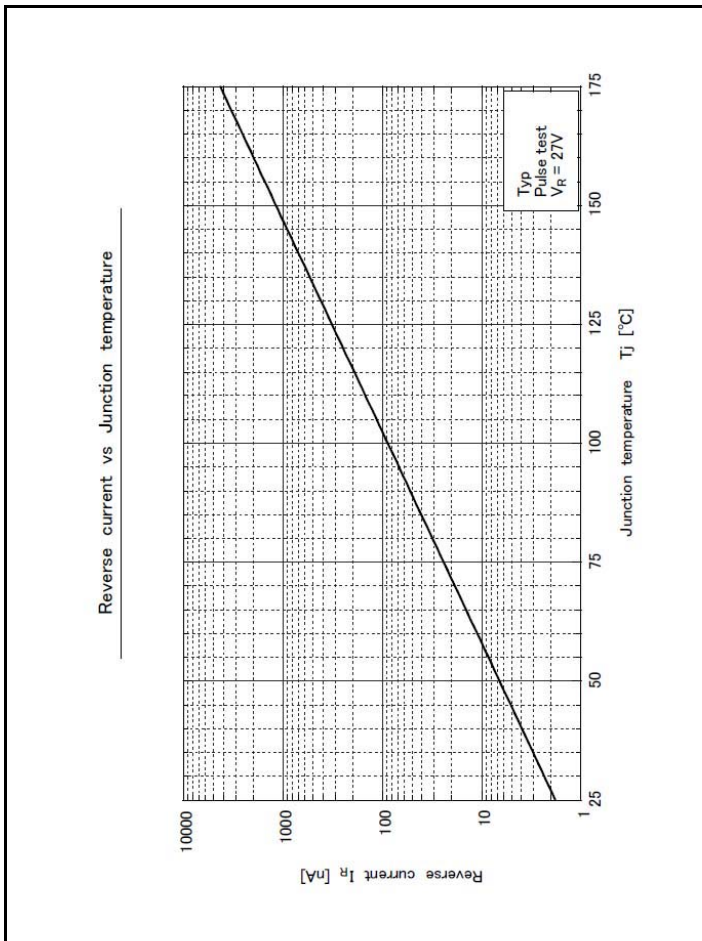
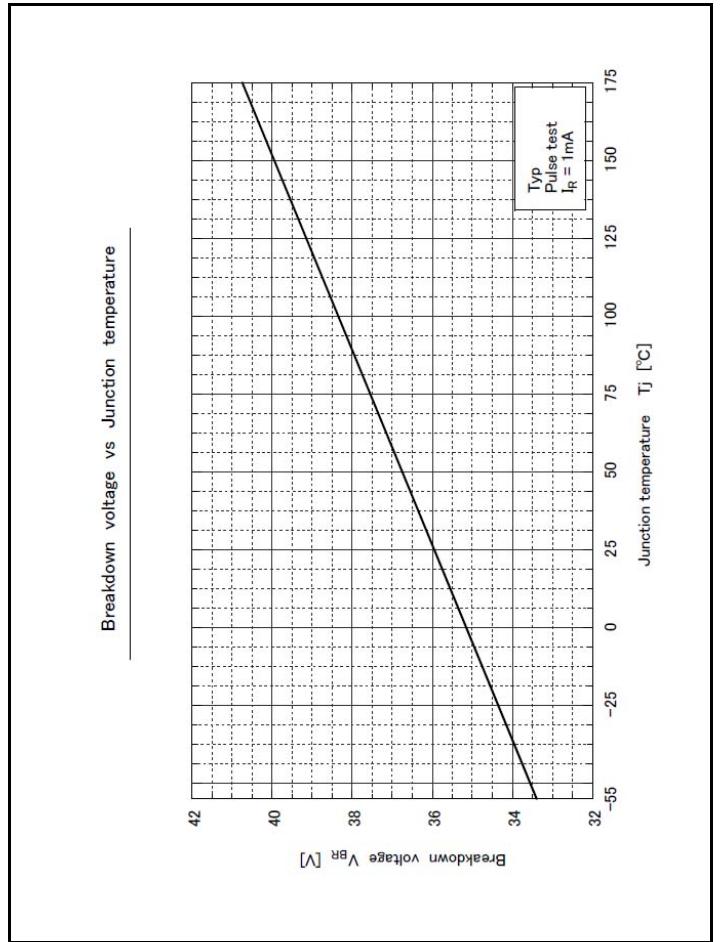
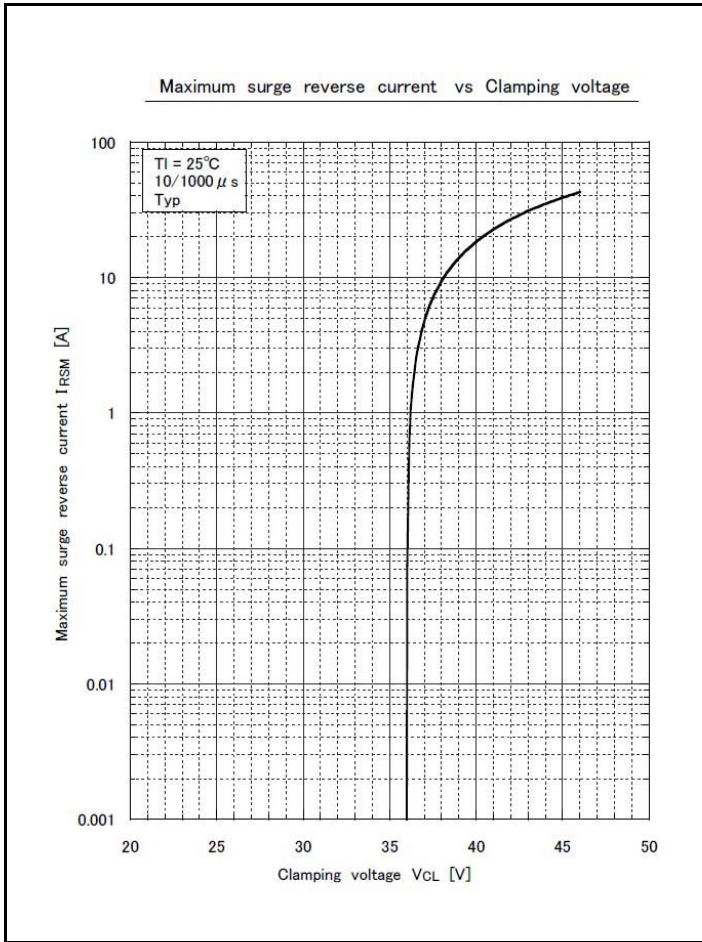
※ :See the original Specifications

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

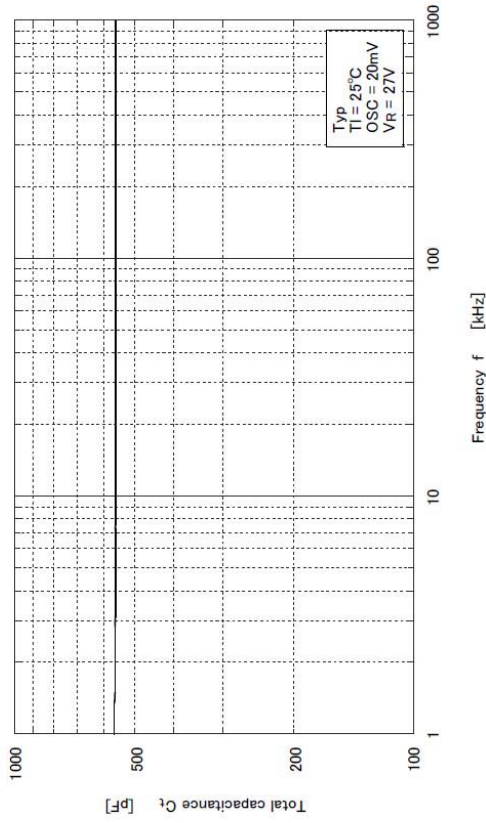
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V _{BR}	IR=1mA, Pulse measurement	34	36	38	V
Reverse current	I _R	VR=27V, Pulse measurement			5	μA
Thermal resistance	R _{th(j-l)}	Junction to lead, On glass-epoxy substrate ※			23	°C/W
Thermal resistance	R _{th(j-a)}	Junction to ambient, On glass-epoxy substrate ※			115	°C/W
Restriction voltage	V _{CL}	10/1000μs, IRSM=40A ※			50	V
Temperature coefficient	rz				0.12	%/°C

※ :See the original Specifications

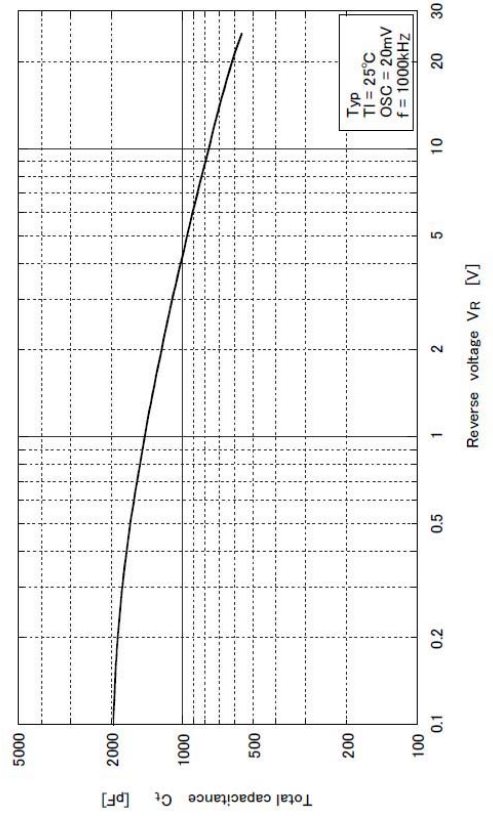
CHARACTERISTIC DIAGRAMS



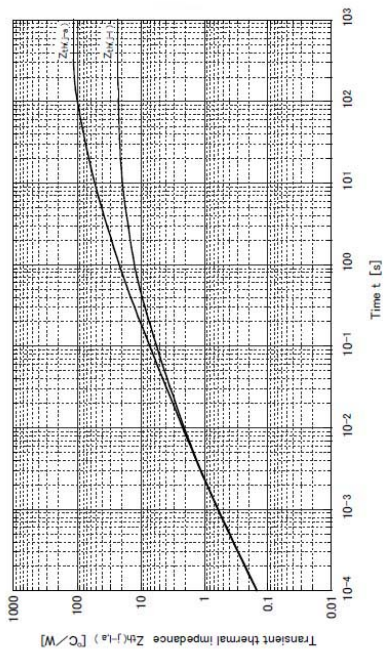
Total capacitance vs Frequency



Total capacitance vs Reverse voltage

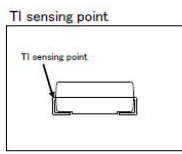


Transient thermal impedance vs Time



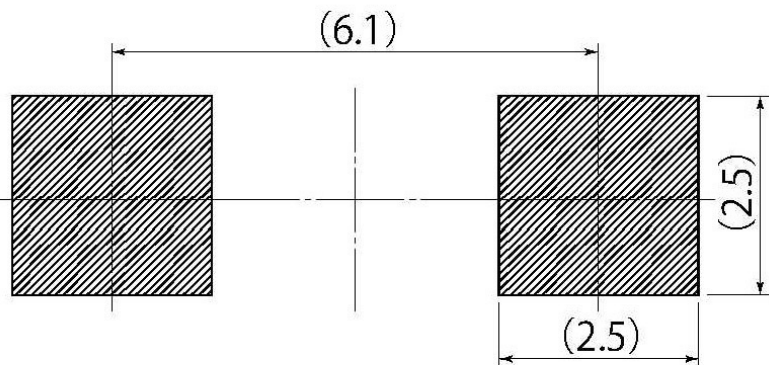
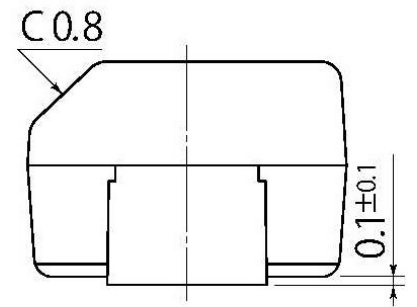
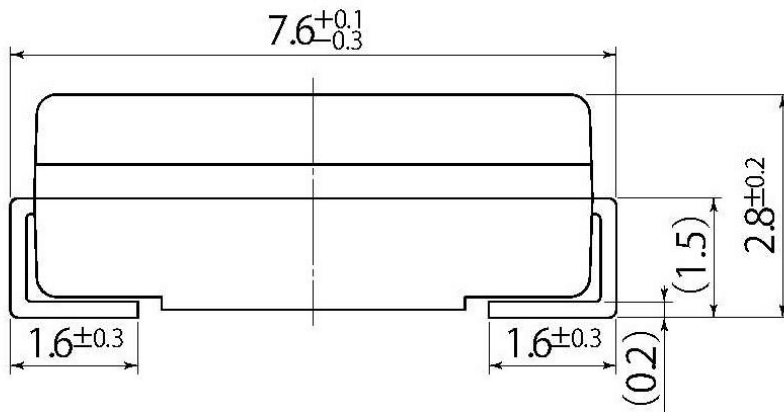
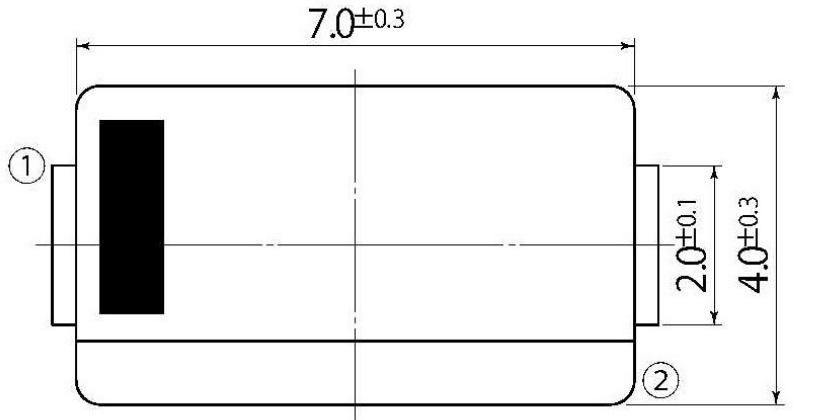
Substrate detail

Type	Glass/epoxy
Size	1 inch ²
Thickness	1mm
Conductor thickness	35μm
Pattern area	44.5mm ²



B10

JEDEC Code	—
JEITA Code	—
House Name	2F



Referential Soldering Pad

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

Notes

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