

ST06-36CE

TVS

12.4A, 600W

Feature

- Optimized for Multiple Protection Purposes
[ESD],[Lighting Surge],[Automotive Transient Surge]
- Peak pulse power:600W
- High Speed
- Thin, high protection
- Small SMD
- Flat Lead
- Based on AEC-Q101
- Tj=175°C
- Pb free terminals
- RoHS_Yes

OUTLINE

Package (House Name): CE

Package (JEITA Code): SC-110B



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, Exponential wave ※	12.4	A
Maximum surge reverse power	P _{RSM}	10/1000μs, Non-repetitive	600	W
Continuous (direct) reverse voltage	V _{R(DC)}		27	V

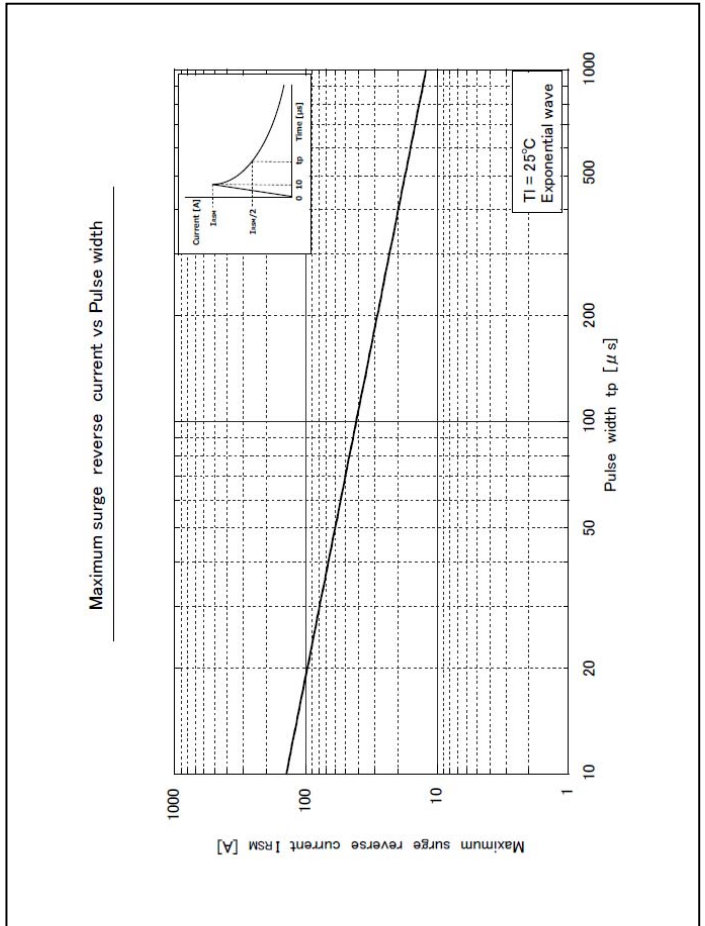
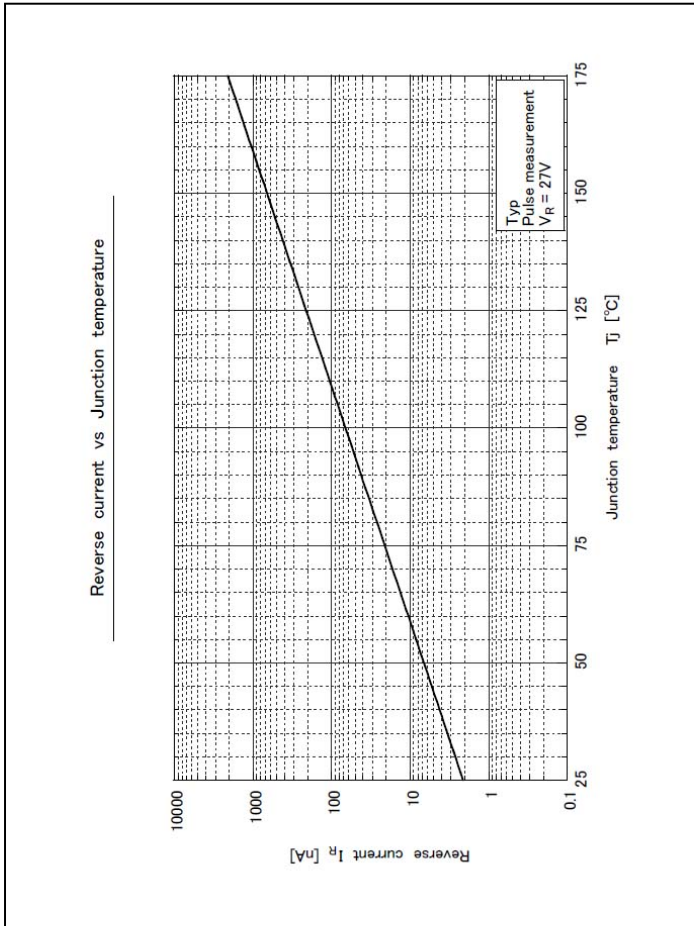
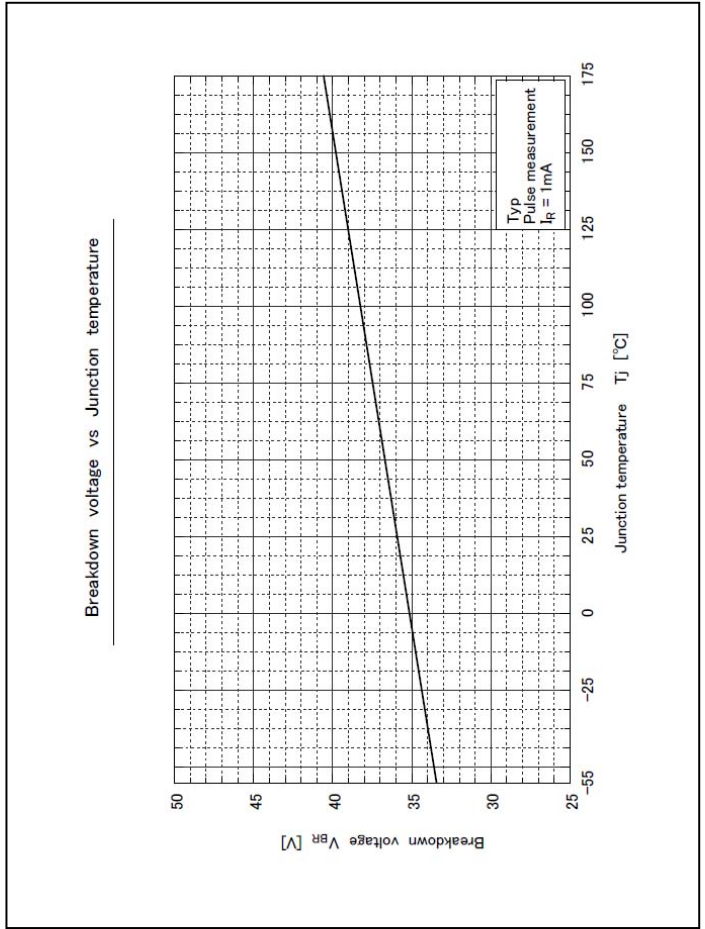
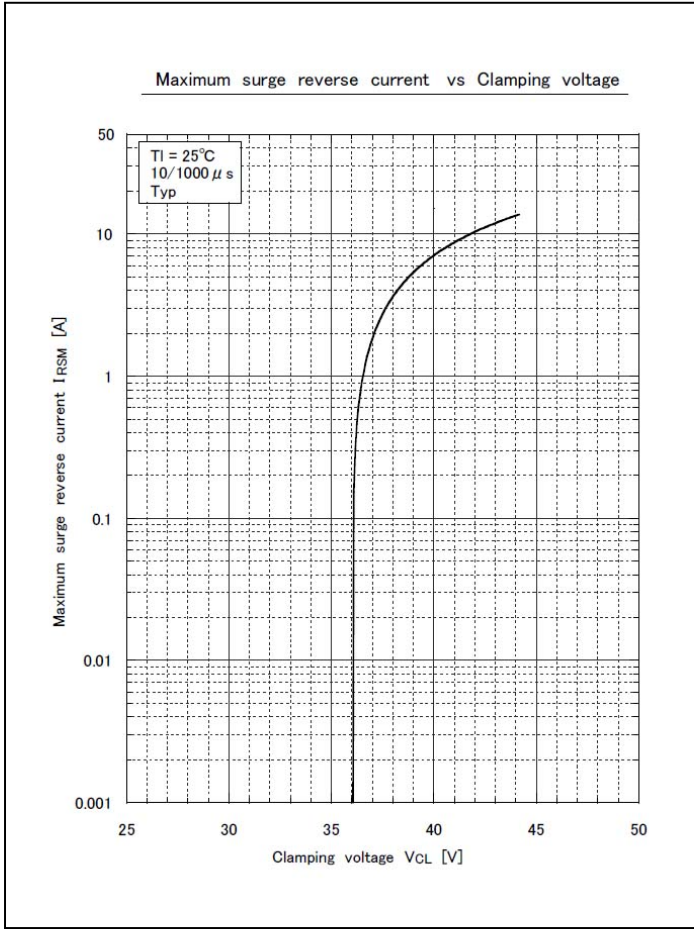
※ : See the original Specifications

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

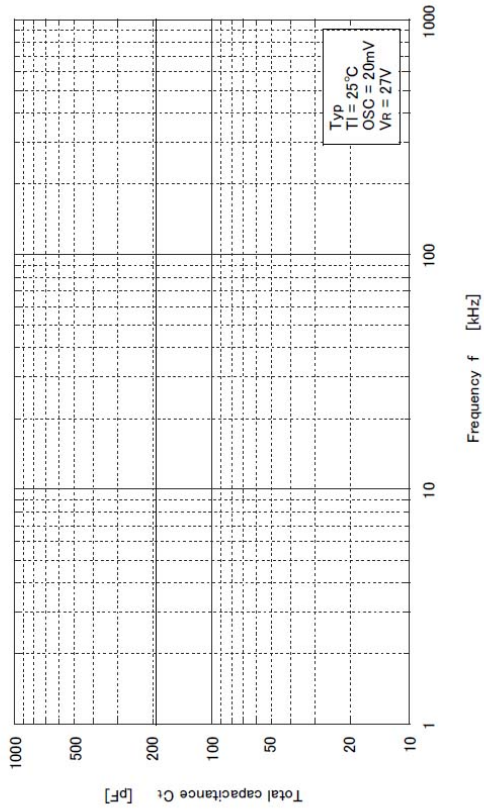
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V _{BR}	IR=1mA, Pulse measurement	34		38	V
Reverse current	I _R	VR=27V, Pulse measurement			5	μA
Electrostatic discharge capability	V _{ESD}	C=330pF, R=330Ω, Polarity±, Aerial discharge ※		30		kV
Thermal resistance	Rth(j-l)	Junction to lead, On glass-epoxy substrate			15	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			115	°C/W
Thermal resistance	Rth(j-a)	Junction to ambient, On glass-epoxy substrate ※			172	°C/W

※ : See the original Specifications

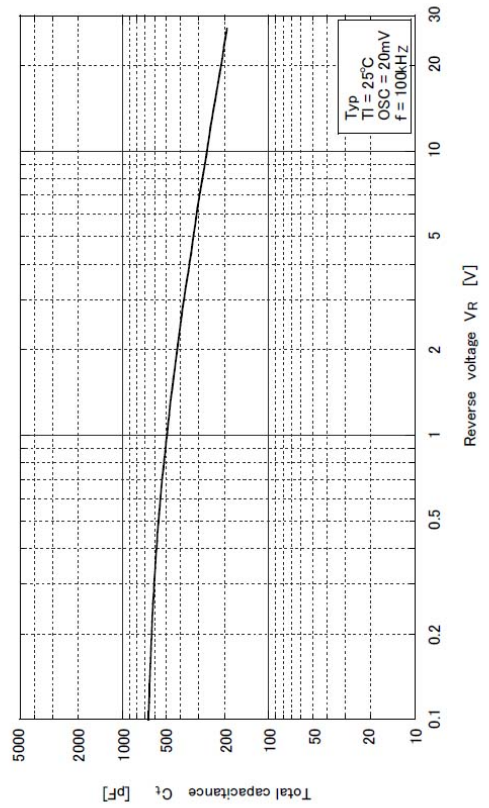
CHARACTERISTIC DIAGRAMS



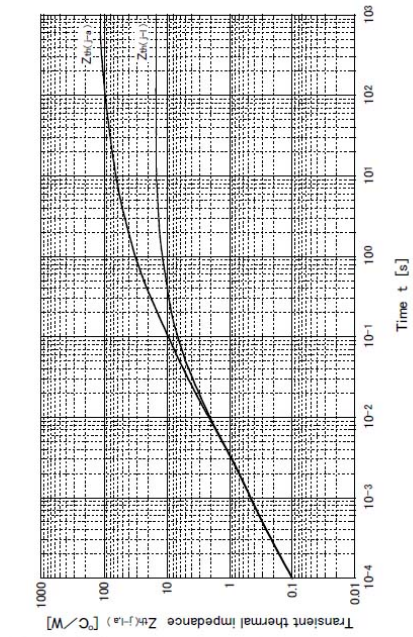
Total capacitance vs Frequency



Total capacitance vs Reverse voltage

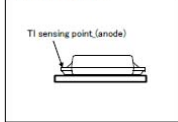


Transient thermal impedance vs Time

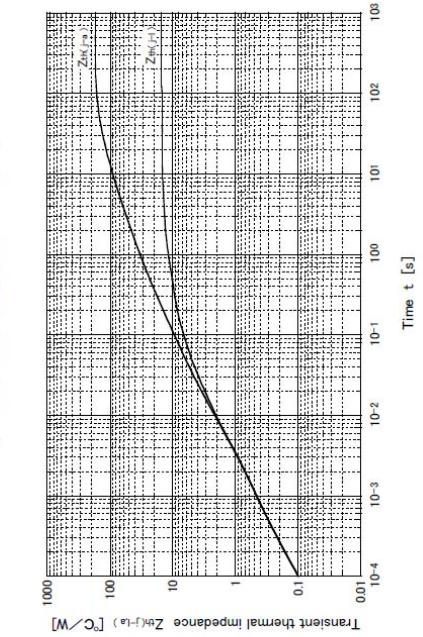


Substrate detail	
Type	Glass-epoxy
Size	2 inch ²
Thickness	1mm
Conductor thickness	35µm
Pattern area	100mm ²

TI sensing point



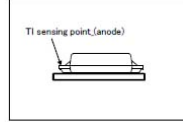
Transient thermal impedance vs Time



Substrate detail

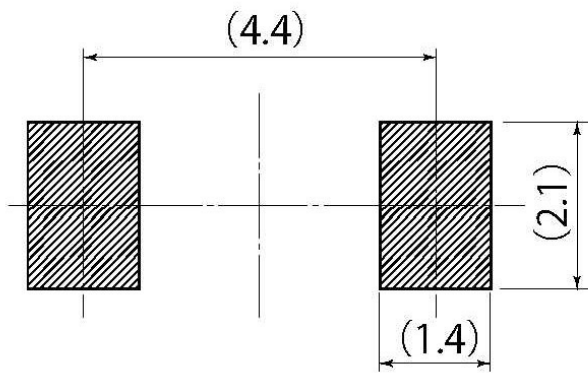
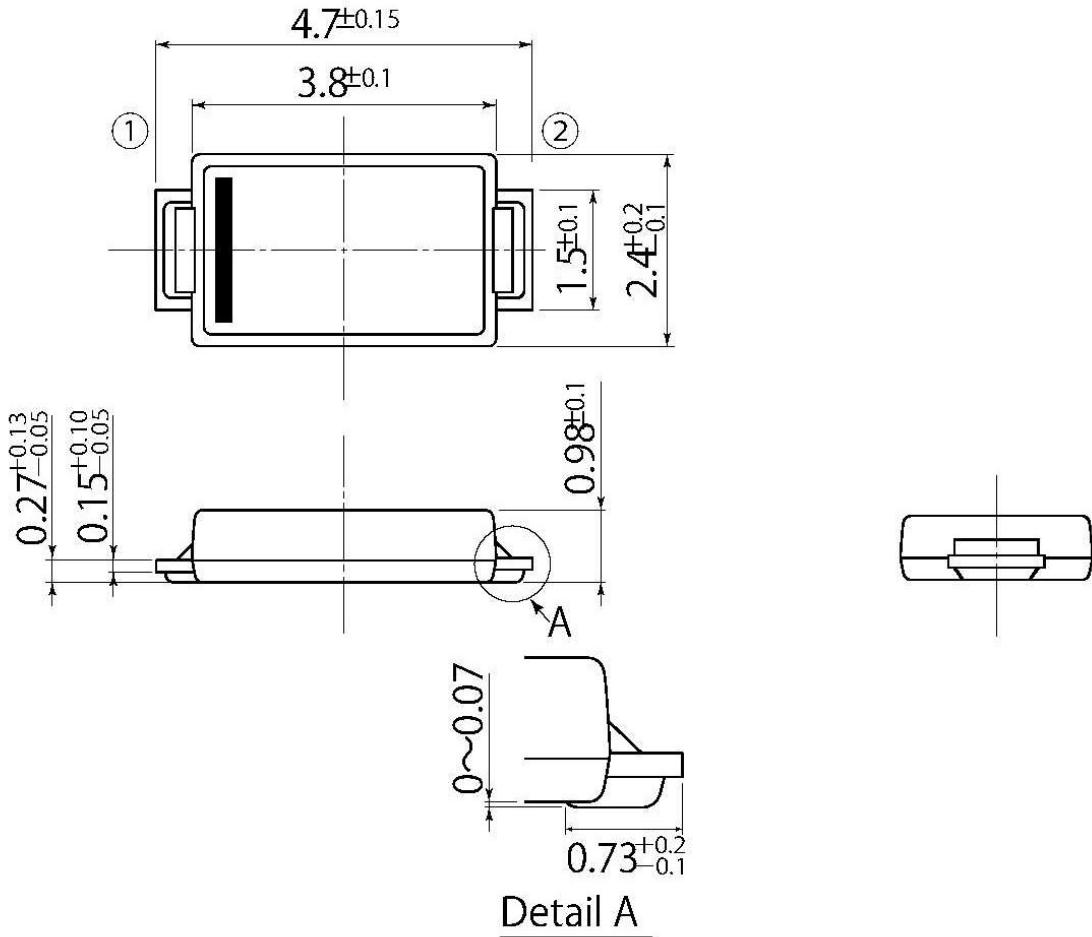
Type	Glass-epoxy
Size	2 inch ²
Thickness	1mm
Conductor thickness	35µm
Pattern area	32mm ²

TI sensing point



B5

JEDEC Code	—
JEITA Code	SC-110B
House Name	CE



Referential Soldering Pad

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

Notes

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