

ST06-33CE

TVS

14A, 600W

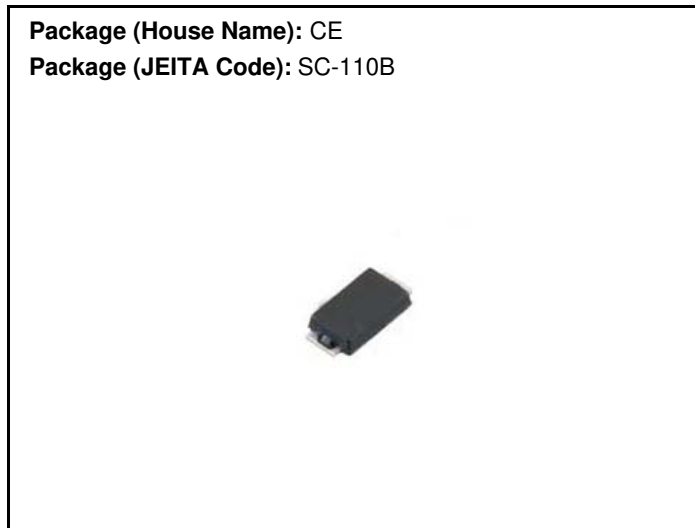
Feature

- Peak pulse power:600W
- Small SMD
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

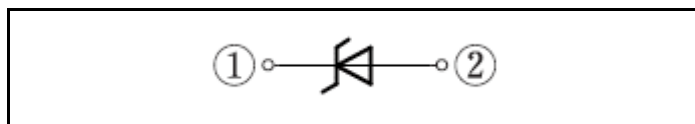
OUTLINE

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	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 ※	14	A
Maximum surge reverse power	P _{RSM}	10/1000μs, Non-repetitive	600	W
Continuous (direct) reverse voltage	V _{R(DC)}		25	V

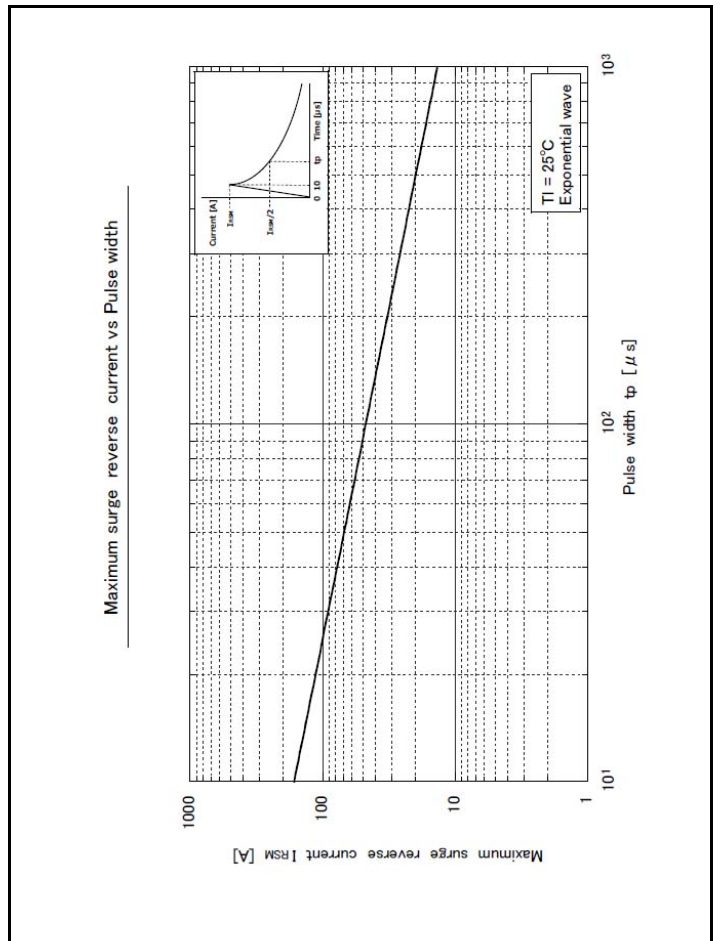
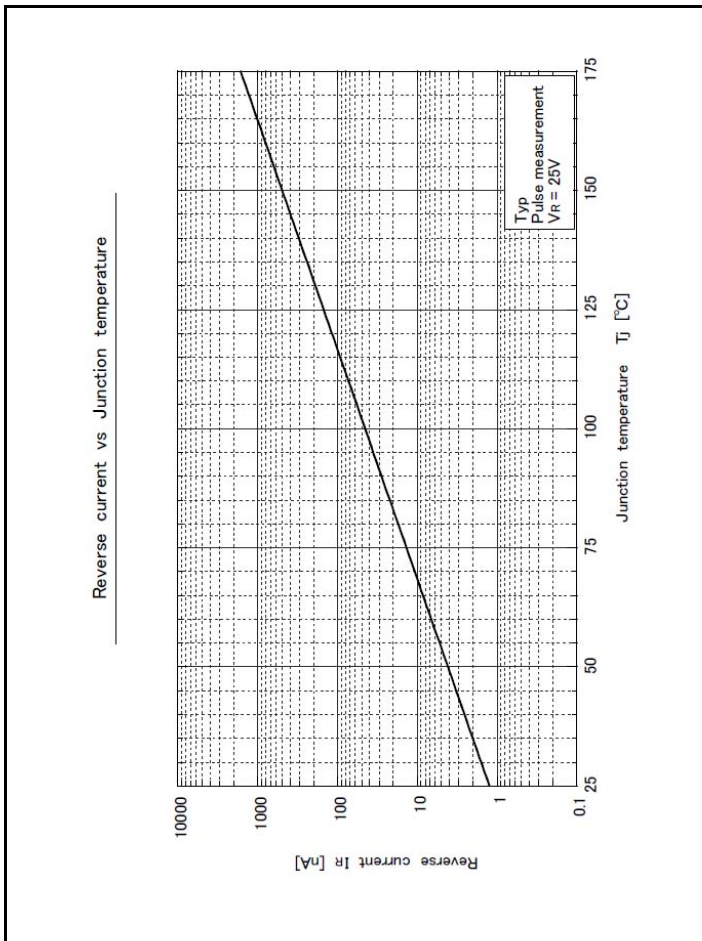
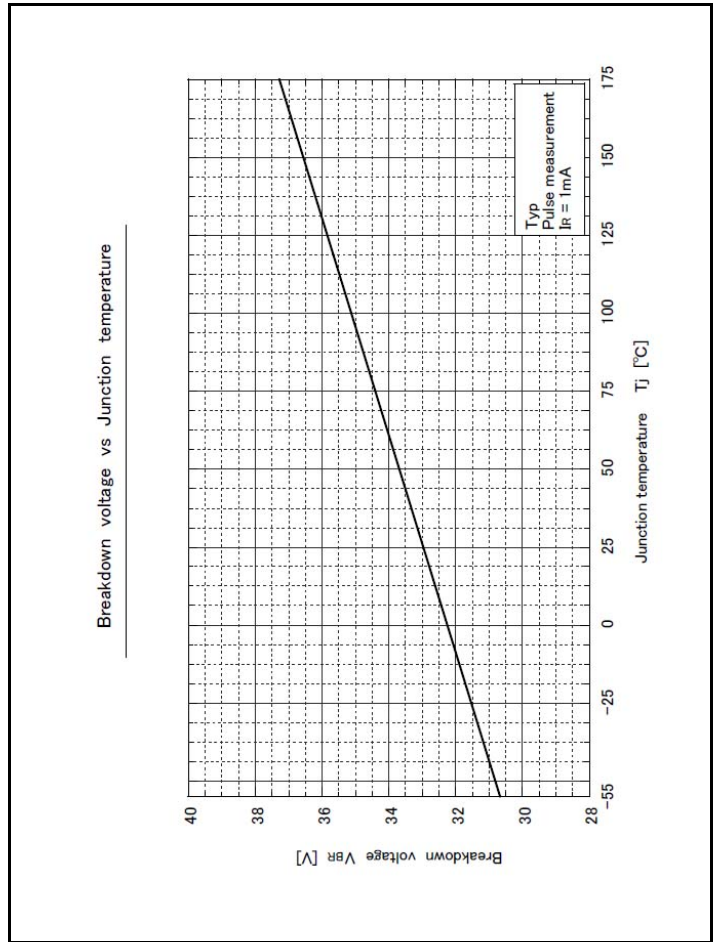
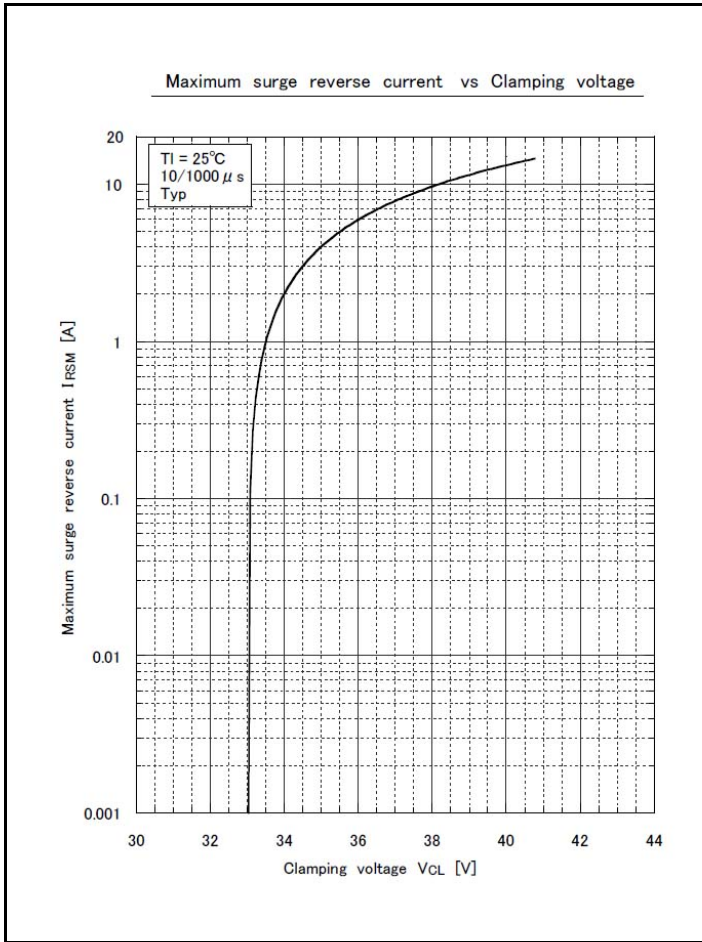
※ : See the original Specifications

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

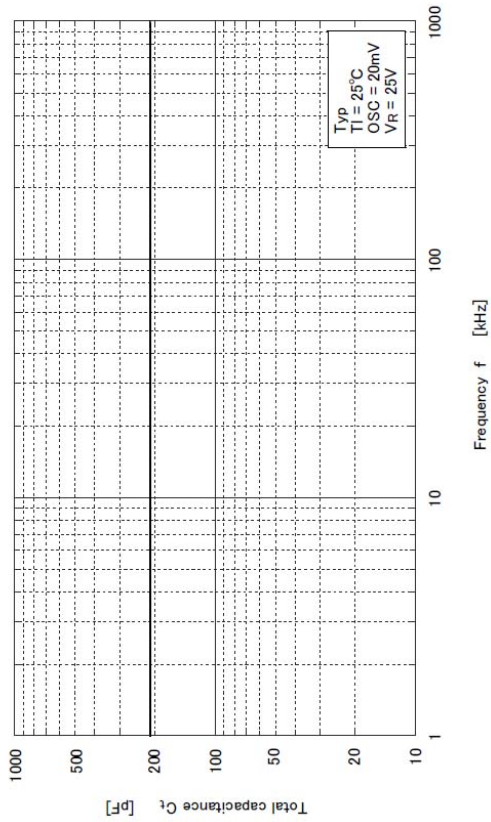
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V _{BR}	IR=1mA, Pulse measurement	31		35	V
Reverse current	I _R	VR=25V, Pulse measurement			5	μA
Electrostatic discharge capability	V _{ESD}	C=330pF, R=330Ω, Polarity±, Aerial discharge ※		30		kV
Thermal resistance	Rth(j-l)	Junction 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

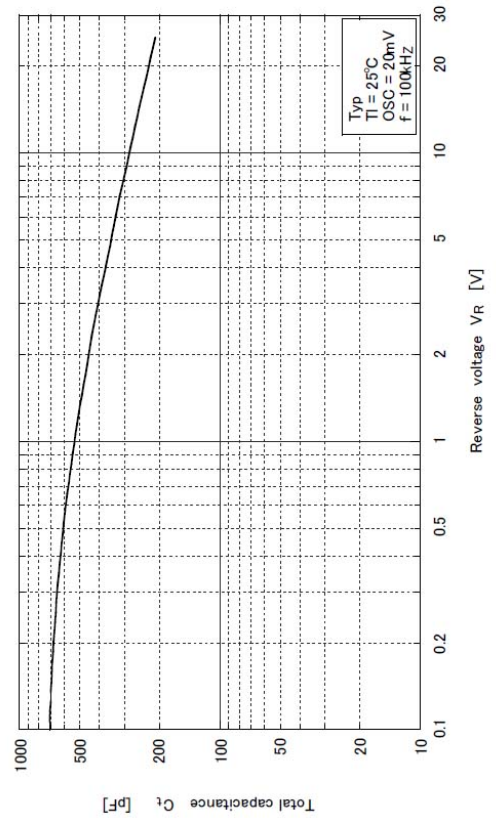
CHARACTERISTIC DIAGRAMS



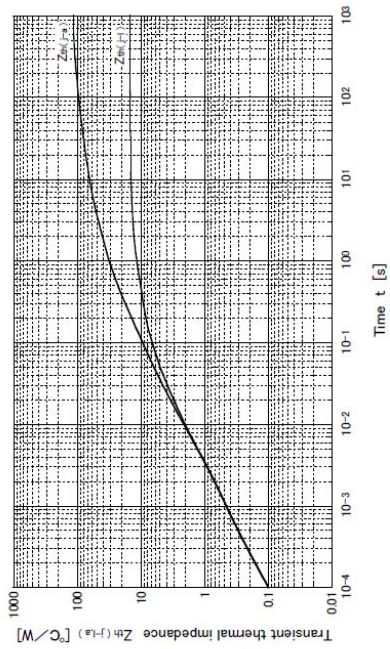
Total capacitance vs Frequency



Total capacitance vs Reverse voltage



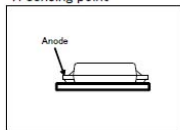
Transient thermal impedance



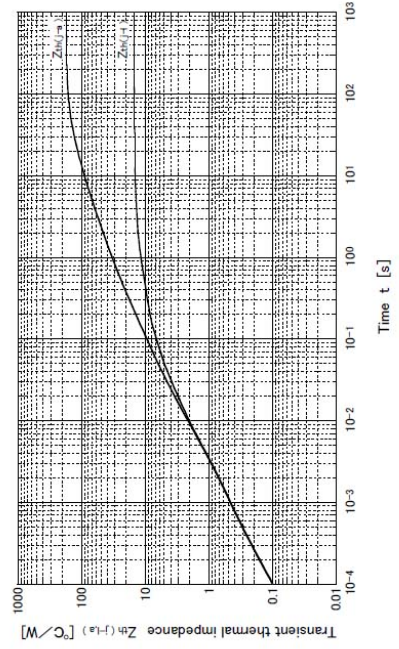
Substrate detail

Type	Glass/epoxy
Size	2 inch ²
Thickness	1mm
Conductor thickness	35μm
Pattern area	160mm ²

TI sensing point



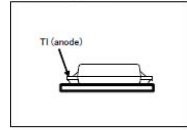
Transient thermal impedance



Substrate detail

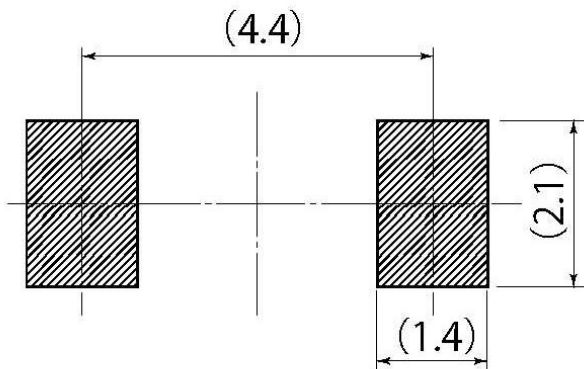
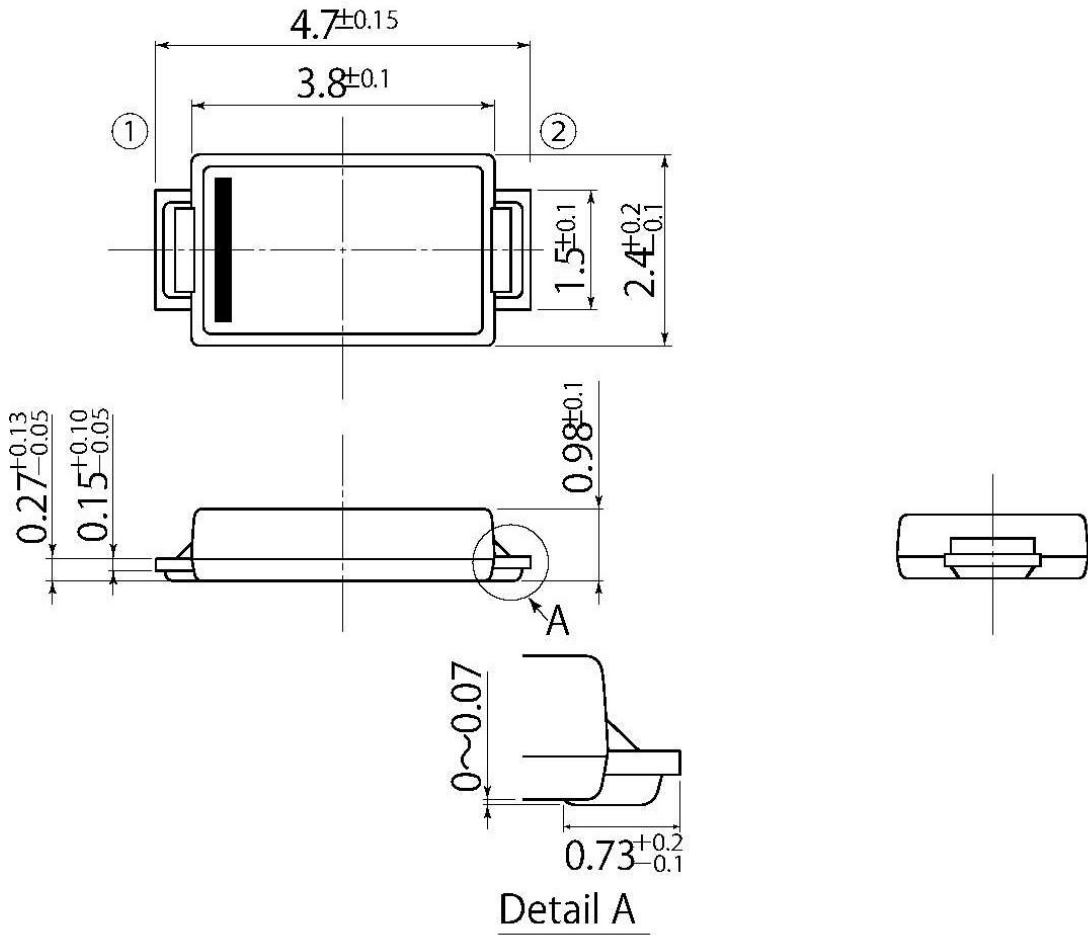
Type	Glass/epoxy
Size	2 inch ²
Thickness	1mm
Conductor thickness	35μm
Pattern area	32mm ²

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.

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