

ST06-33CE

TVS
14A, 600W

Feature

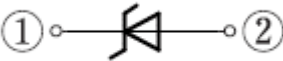
- Peak pulse power:600W
- Small SMD
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

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	Tstg		-55 to 175	°C
Operating junction temperature	Tj		-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

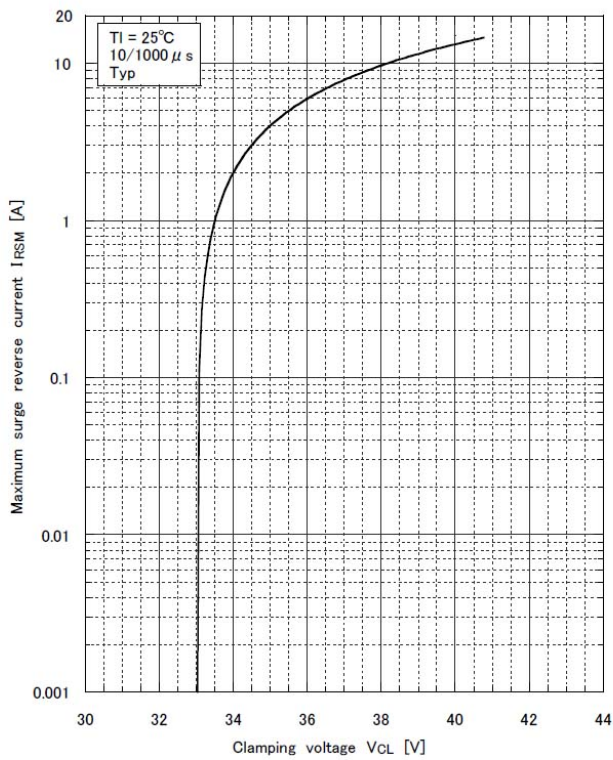
Electrical Characteristics (unless otherwise specified : Tl=25°C)

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

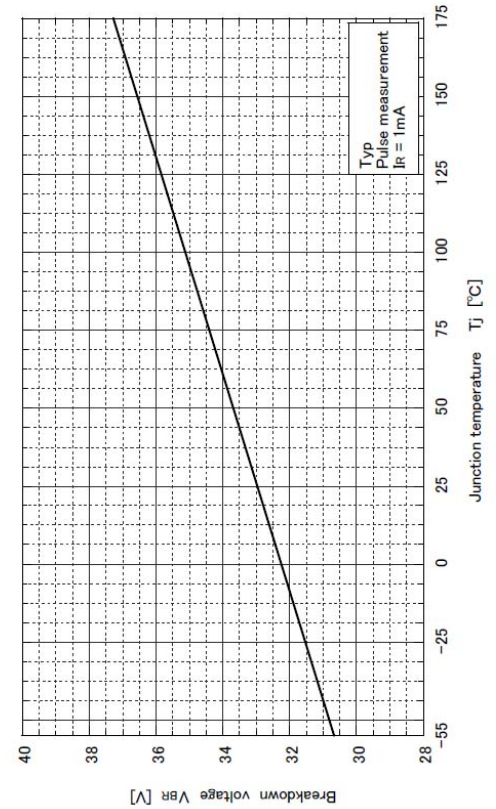
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

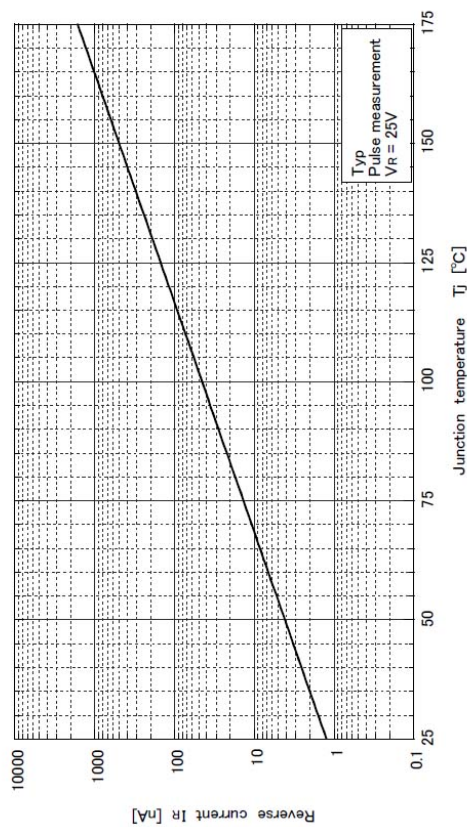
Maximum surge reverse current vs Clamping voltage



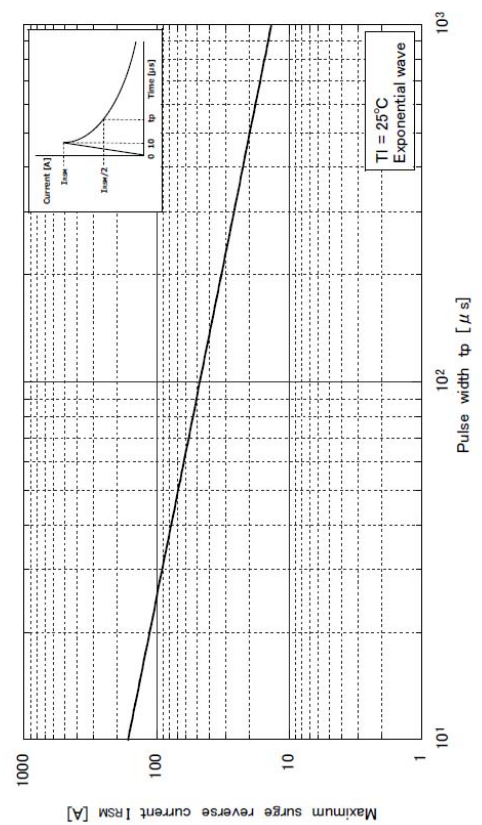
Breakdown voltage vs Junction temperature



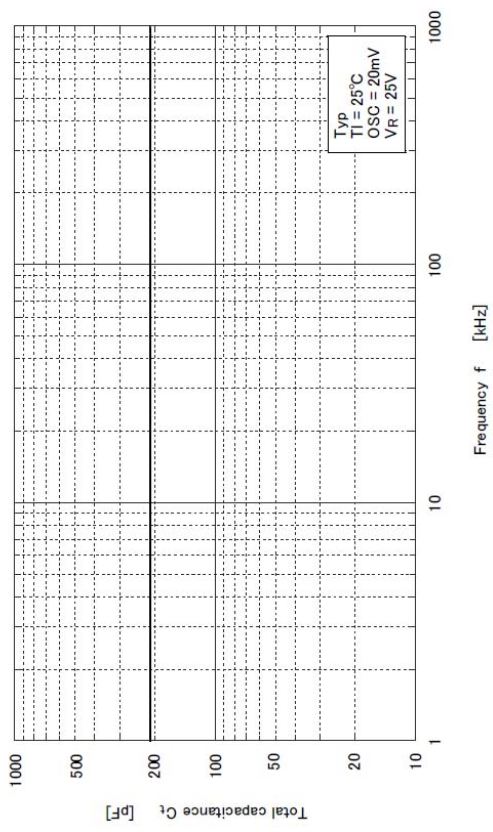
Reverse current vs Junction temperature



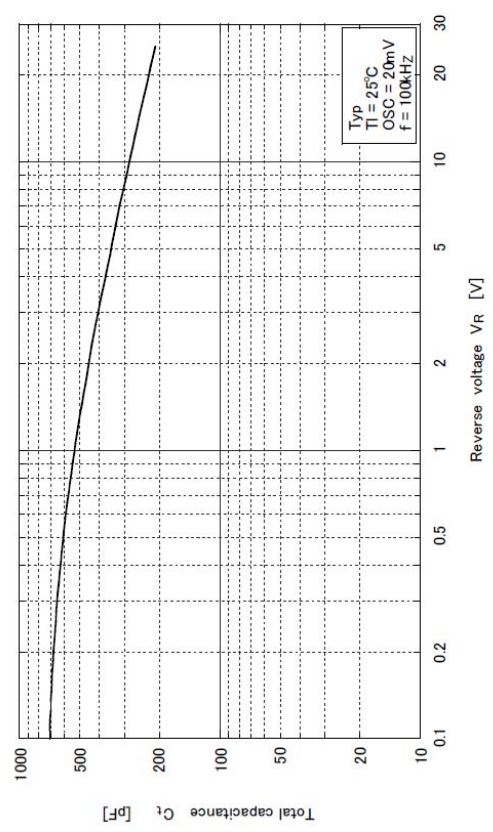
Maximum surge reverse current vs Pulse width



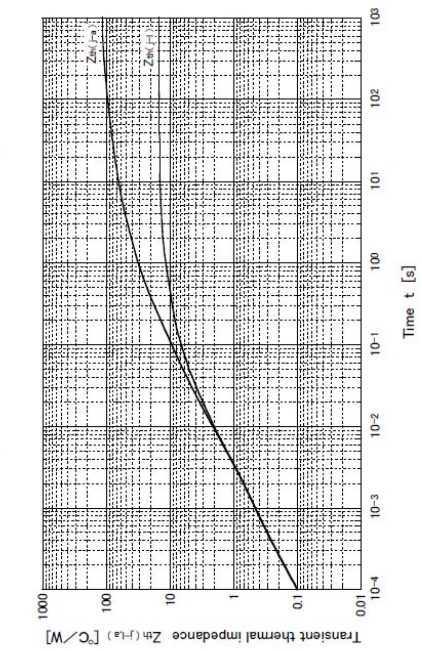
Total capacitance vs Frequency



Total capacitance vs Reverse voltage

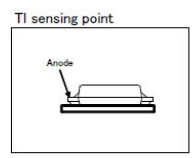


Transient thermal impedance

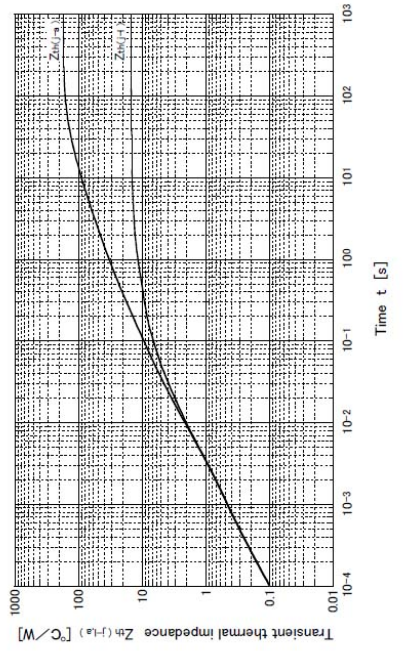


Substrate detail

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

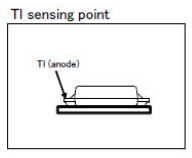


Transient thermal impedance



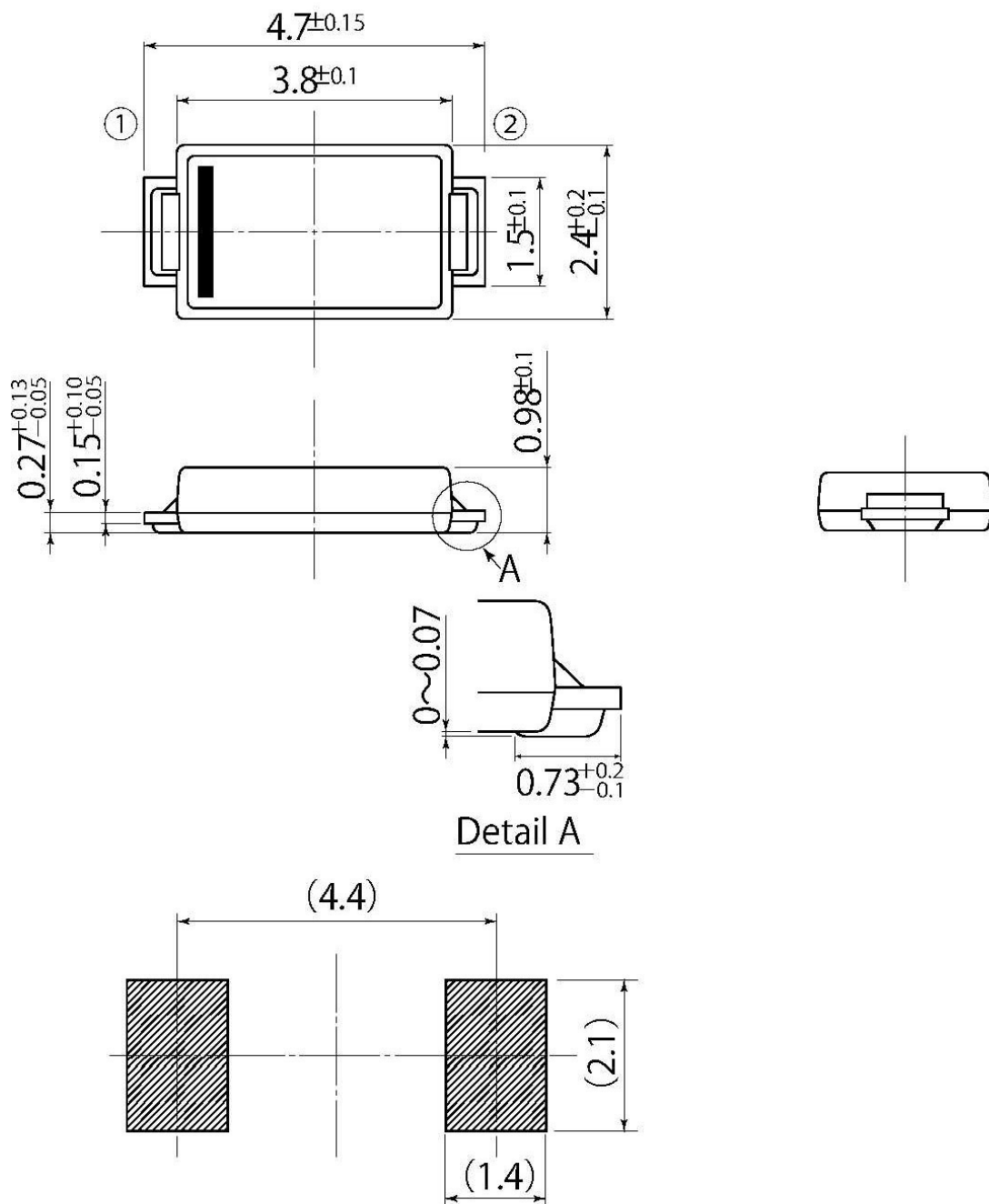
Substrate detail

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



B5

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



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

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