

ST06-27CE

TVS

17.3A, 600W

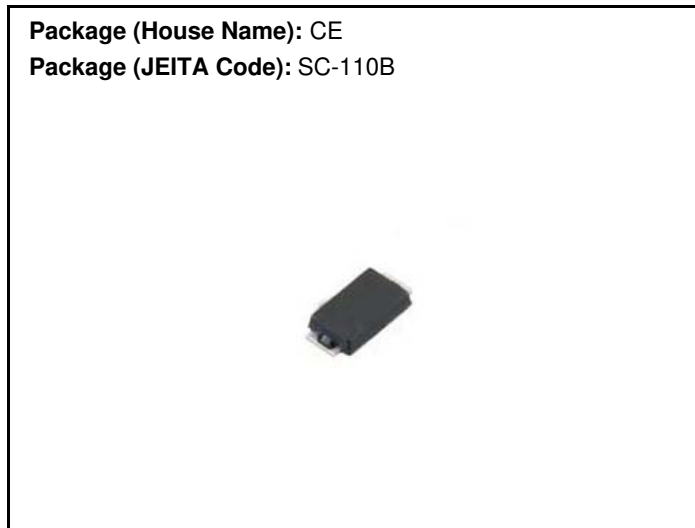
Feature

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

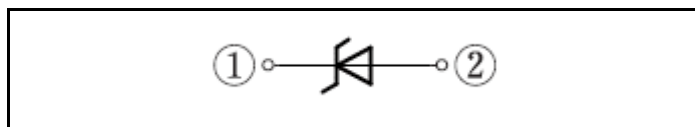
OUTLINE

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, Exponential wave ※	17.3	A
Maximum surge reverse power	P _{RSM}	10/1000μs, Non-repetitive	600	W
Continuous (direct) reverse voltage	V _{R(DC)}		23	V

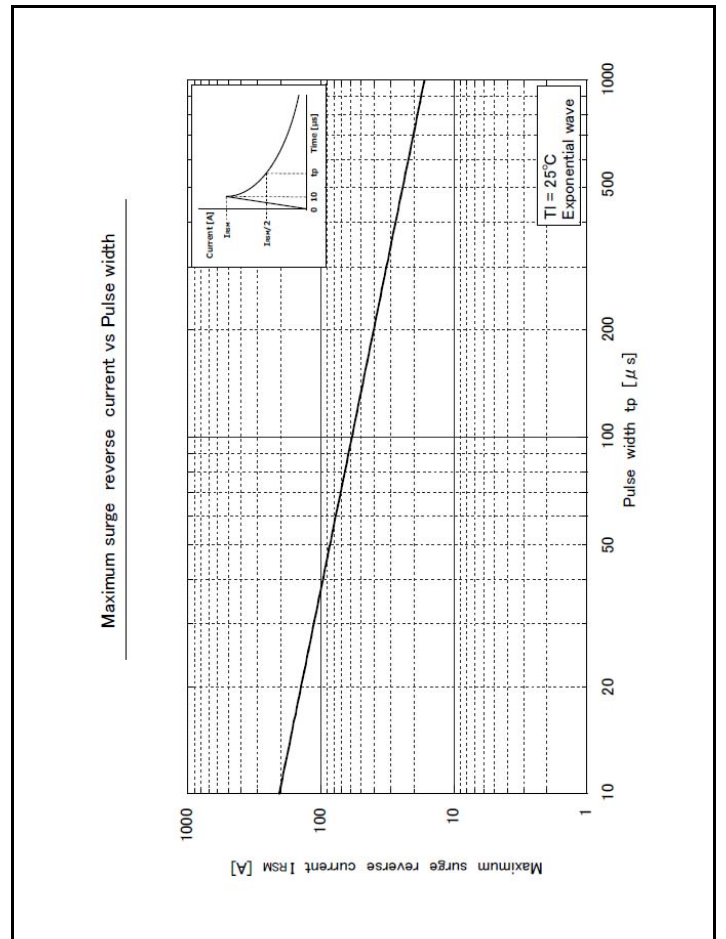
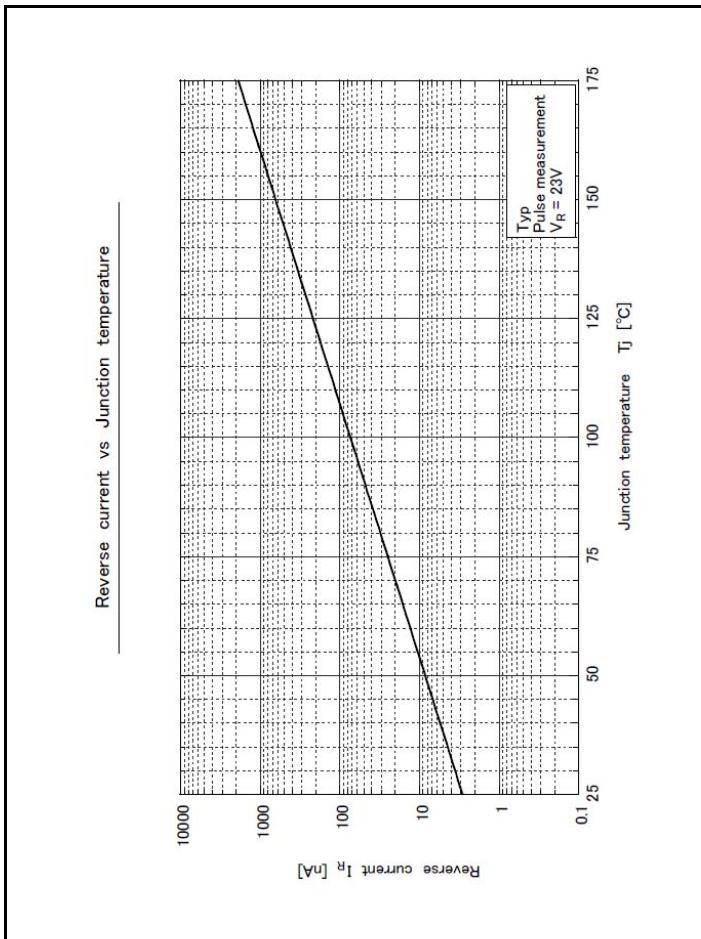
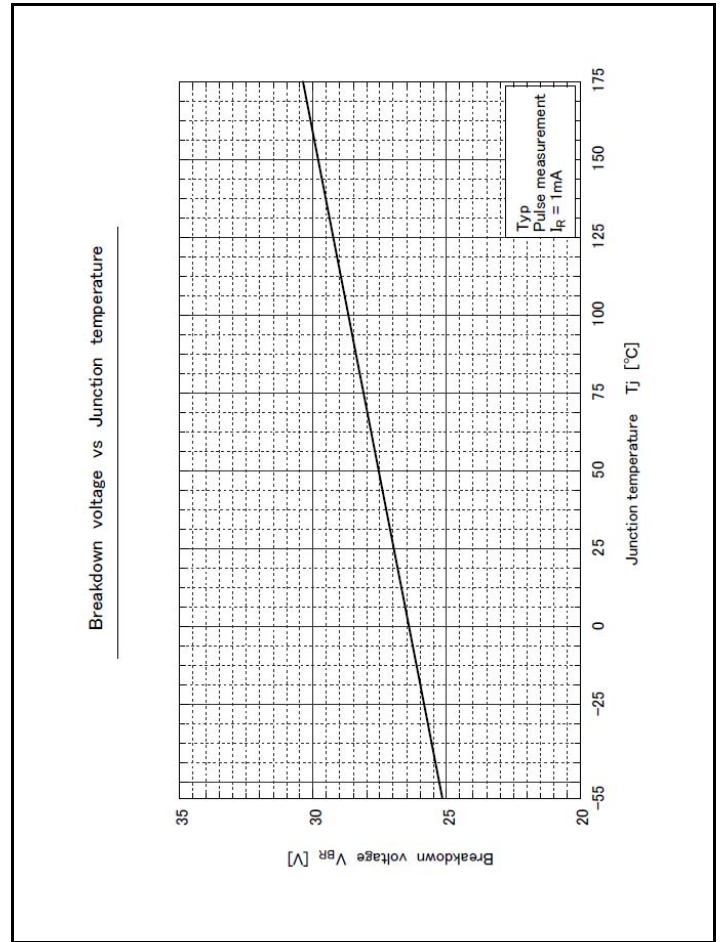
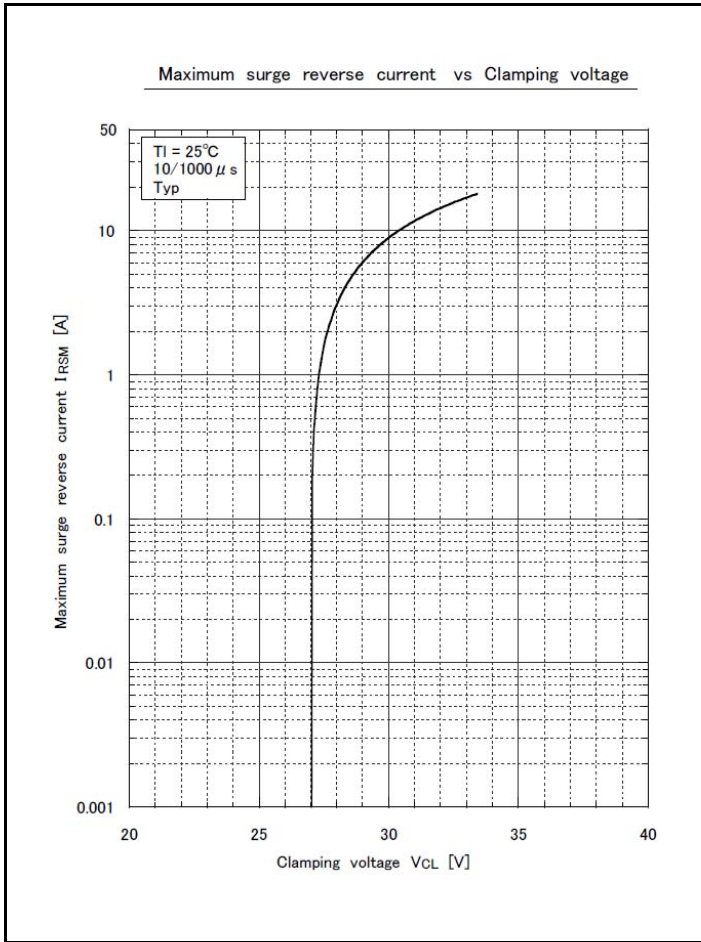
※ : See the original Specifications

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

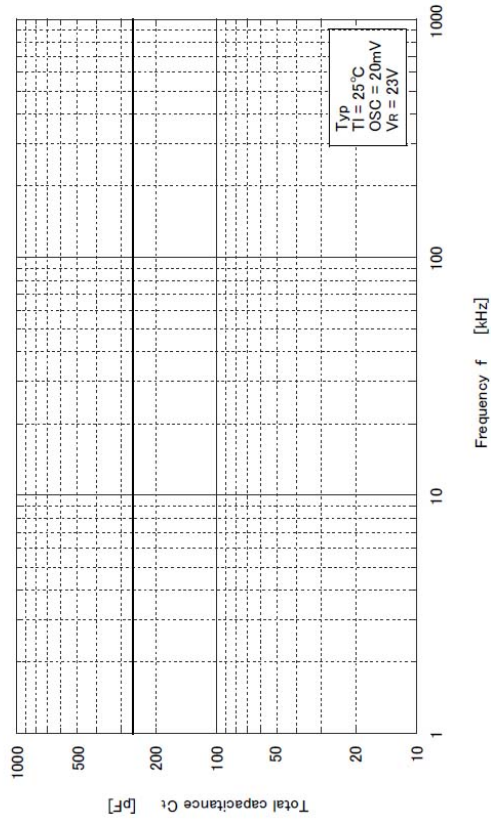
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V_{BR}	$I_R=1mA$, Pulse measurement	25		29	V
Reverse current	I_R	$V_R=23V$, Pulse measurement			5	μA
Electrostatic discharge capability	V_{ESD}	$C=330pF$, $R=330\Omega$, Polarity \pm , Aerial discharge ※		30		kV
Thermal resistance	$R_{th(j-l)}$	Junction to lead, On glass-epoxy substrate			15	$^{\circ}C/W$
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate ※			115	$^{\circ}C/W$
Thermal resistance	$R_{th(j-a)}$	Junction to ambient, On glass-epoxy substrate ※			172	$^{\circ}C/W$

※ :See the original Specifications

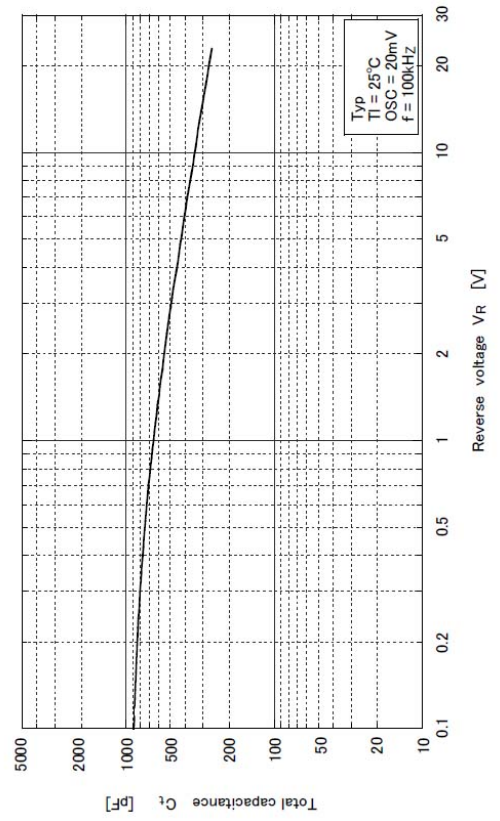
CHARACTERISTIC DIAGRAMS



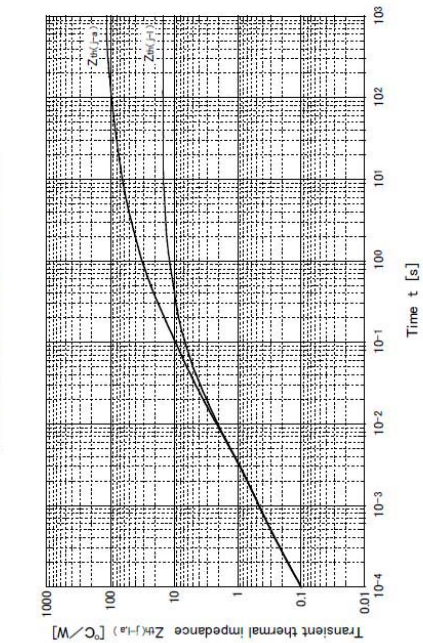
Total capacitance vs Frequency



Total capacitance vs Reverse voltage



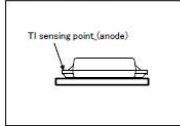
Transient thermal impedance vs Time



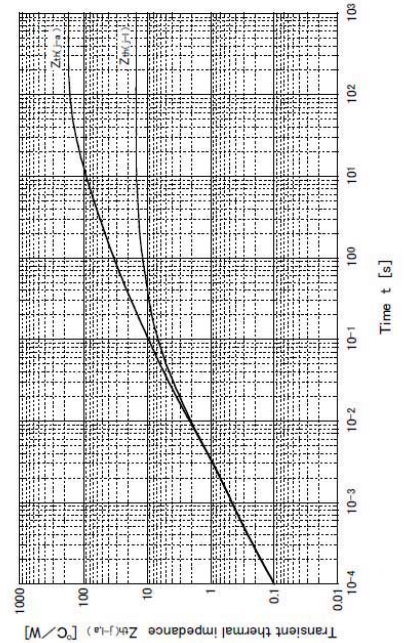
Substrate detail

Type	Glass-epoxy
Size	2 inch ²
Thickness	1mm
Conductor thickness	35μm
Pattern area	180mm ²

TI sensing point



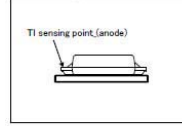
Transient thermal impedance vs Time



Substrate detail

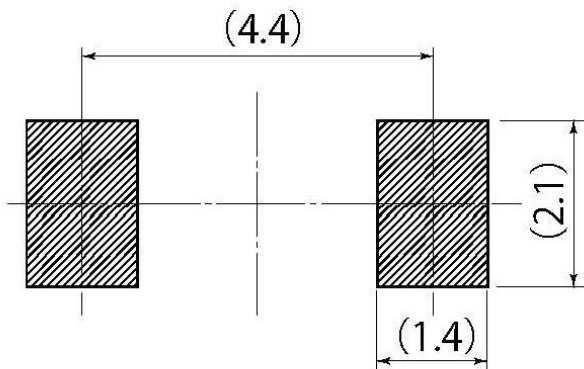
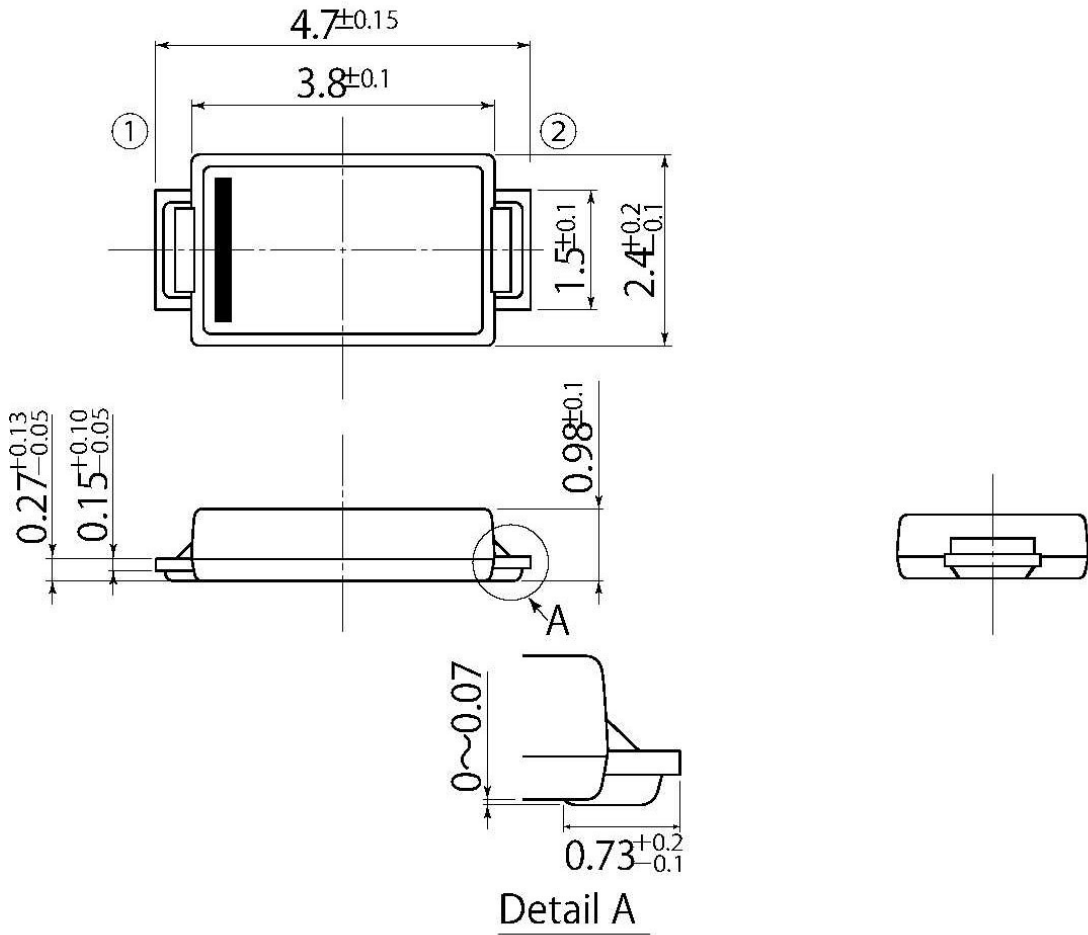
Type	Glass-epoxy
Size	2 inch ²
Thickness	1mm
Conductor thickness	35μm
Pattern area	32mm ²

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.

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