

# ST06-30CE

TVS

15A, 600W

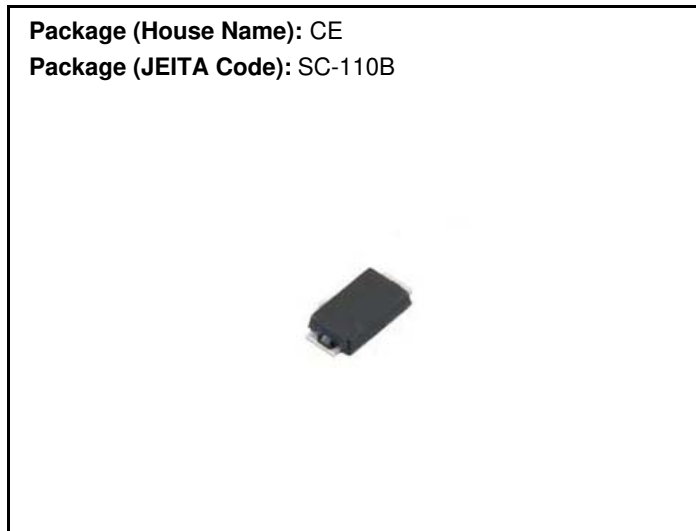
## Feature

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

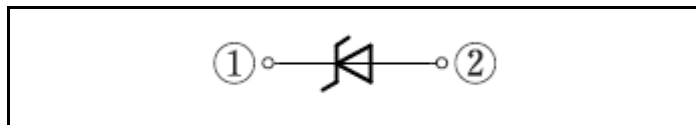
## OUTLINE

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 <sub>stg</sub>		-55 to 175	°C
Operating junction temperature	T <sub>j</sub>		-55 to 175	°C
Maximum surge reverse current	I <sub>RSM</sub>	10/1000μs, Non-repetitive, Exponential wave ※	15	A
Maximum surge reverse power	P <sub>RSM</sub>	10/1000μs, Non-repetitive	600	W
Continuous (direct) reverse voltage	V <sub>R(DC)</sub>		24	V

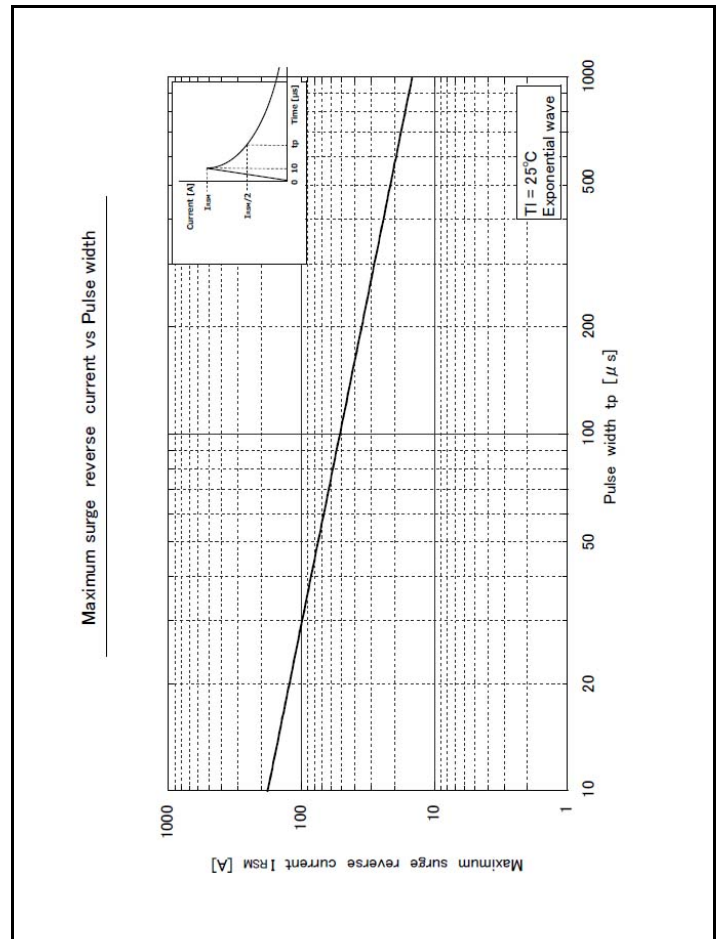
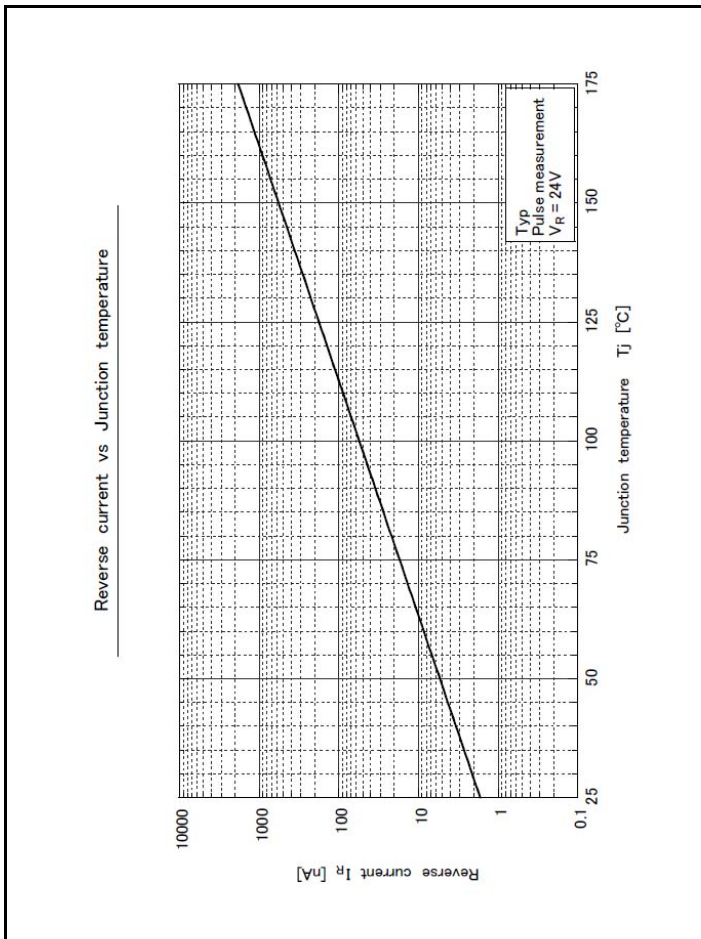
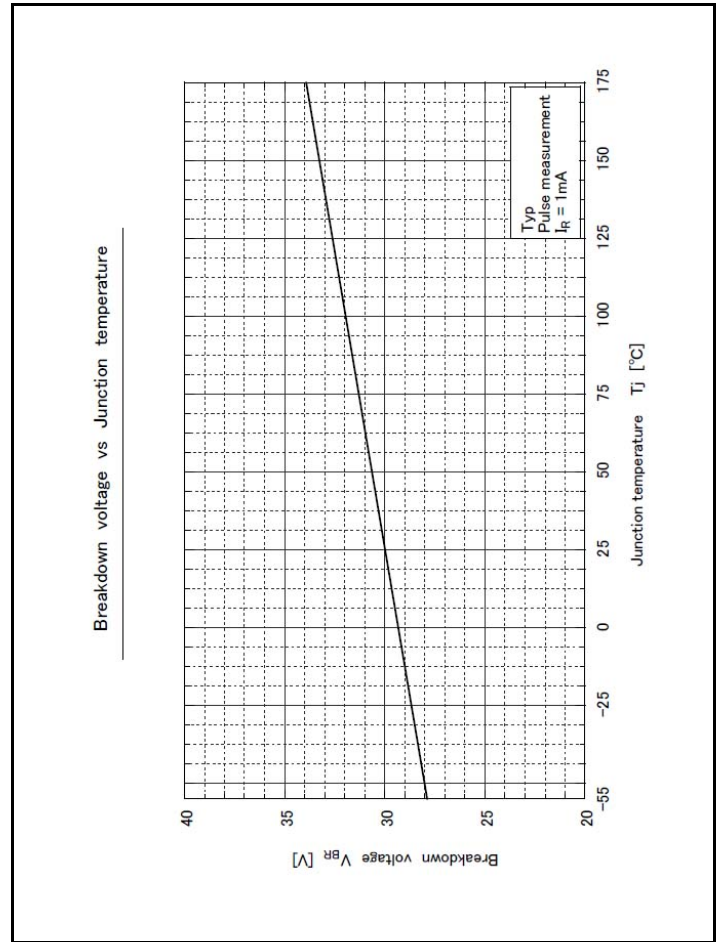
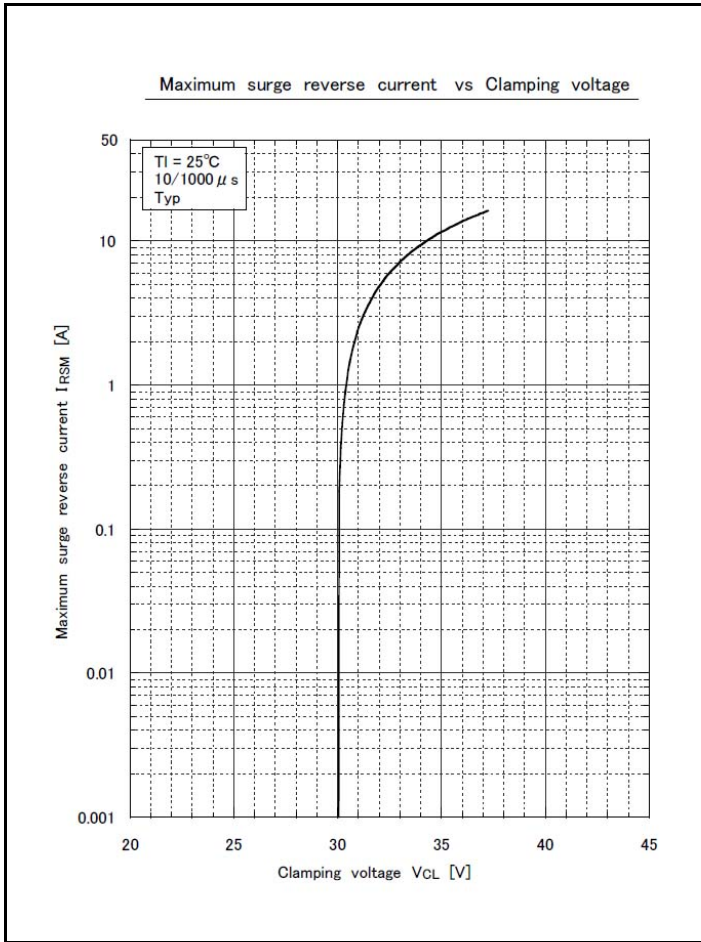
※ : See the original Specifications

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

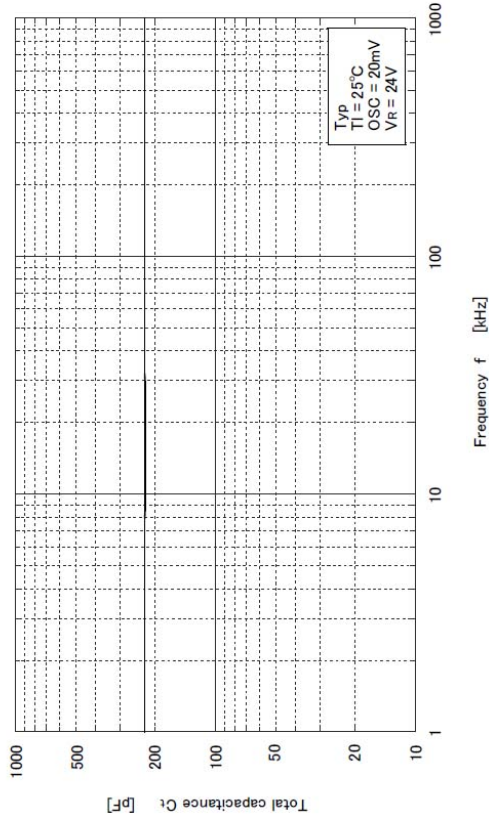
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	$V_{BR}$	$I_R=1mA$ , Pulse measurement	28		32	V
Reverse current	$I_R$	$V_R=24V$ , Pulse measurement			5	$\mu A$
Electrostatic discharge capability	$V_{ESD}$	$C=330pF$ , $R=330\Omega$ , Polarity $\pm$ , Aerial discharge ※		30		kV
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

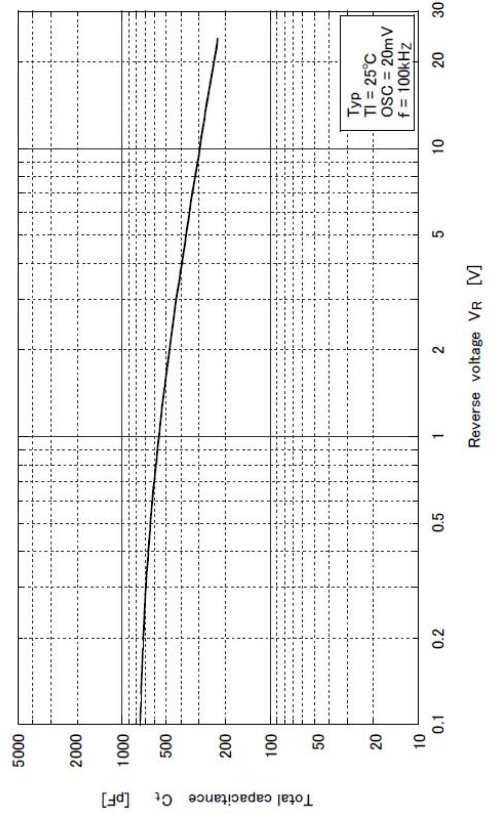
# CHARACTERISTIC DIAGRAMS



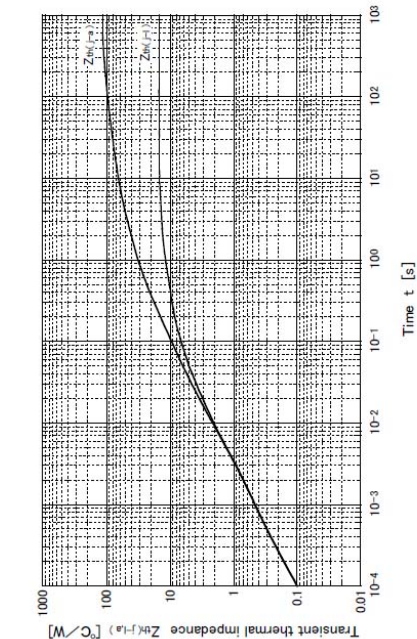
Total capacitance vs Frequency



Total capacitance vs Reverse voltage

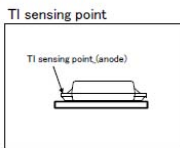


Transient thermal impedance vs Time

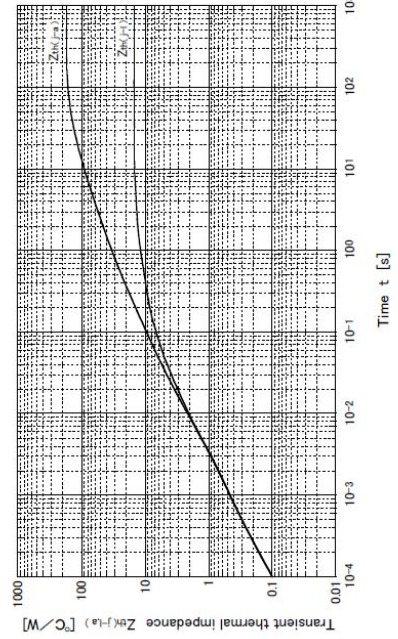


Substrate detail

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

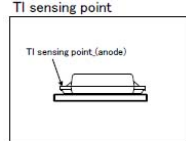


Transient thermal impedance vs Time



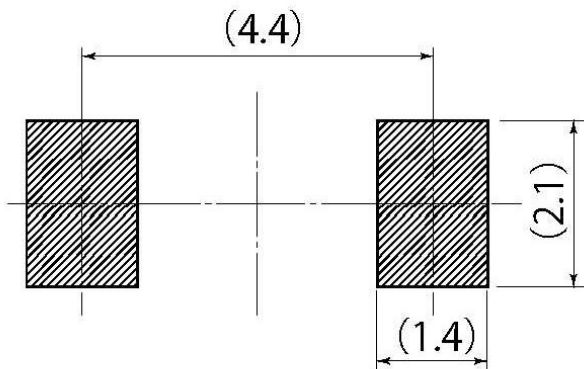
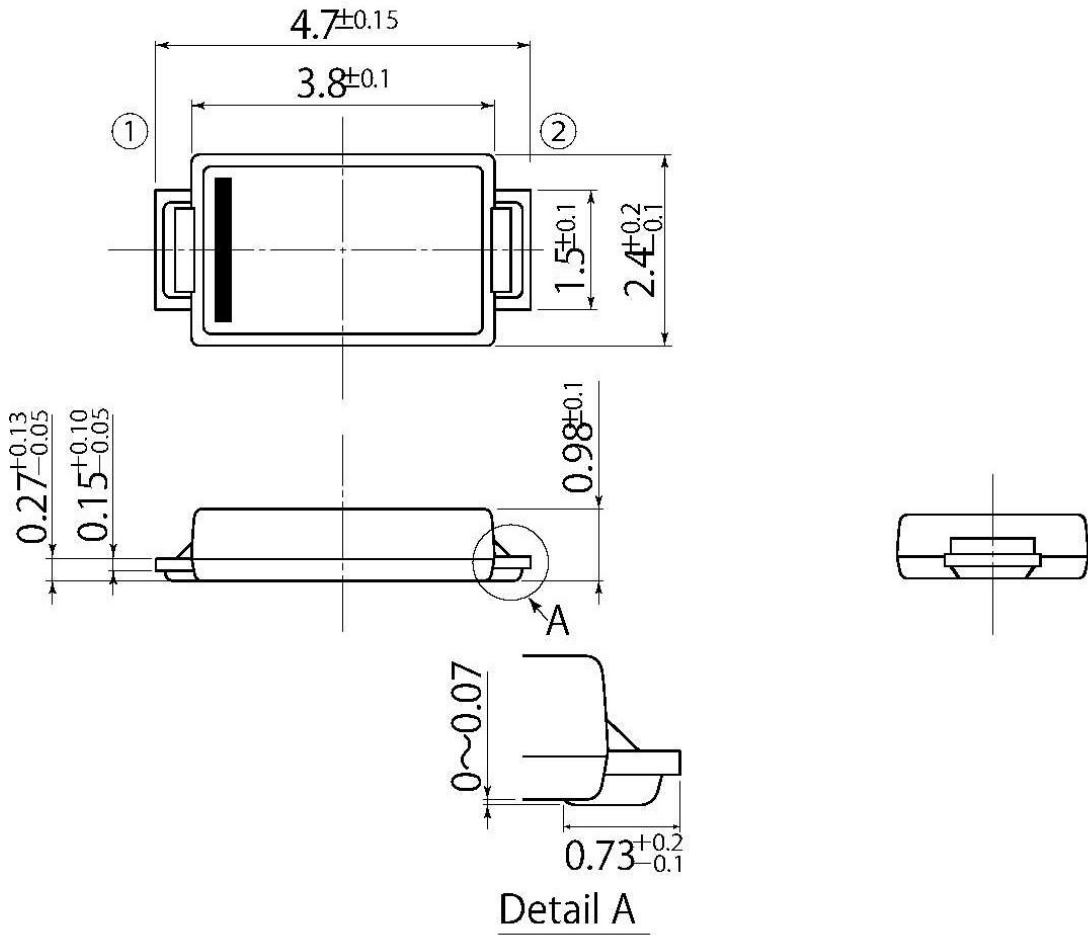
Substrate detail

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



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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