ShinDengen

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℃)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-55 to 175	℃
Operating junction temperature	Tj		-55 to 175	℃
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

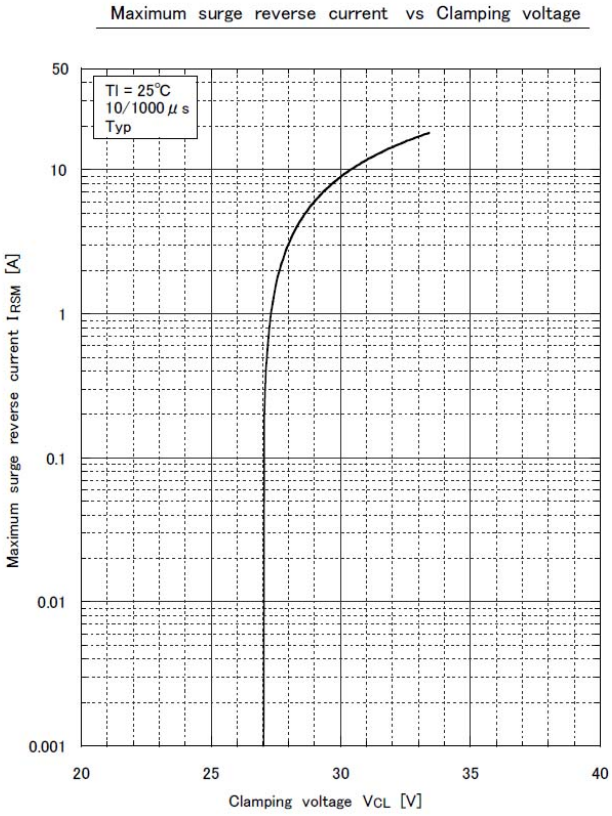
※ ：See the original Specifications

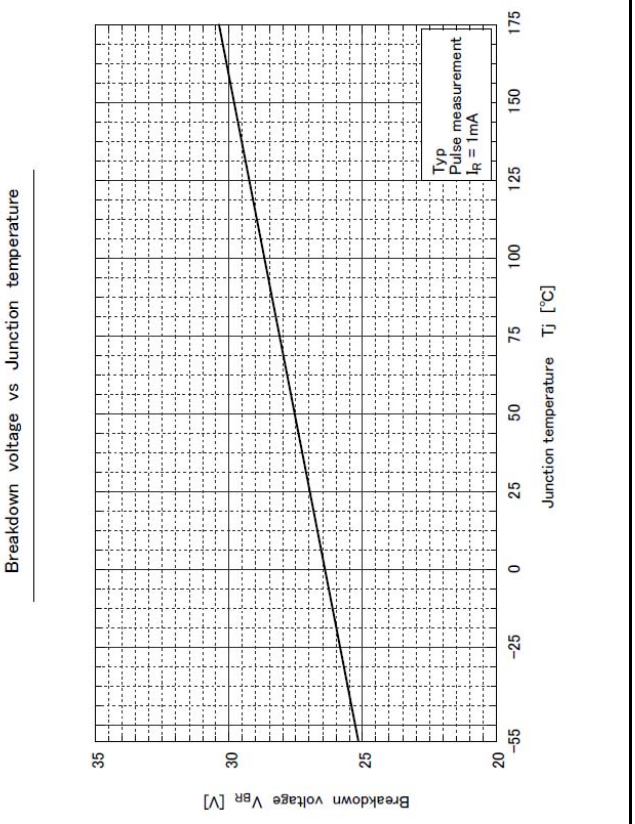
Electrical Characteristics (unless otherwise specified : Tl=25℃)

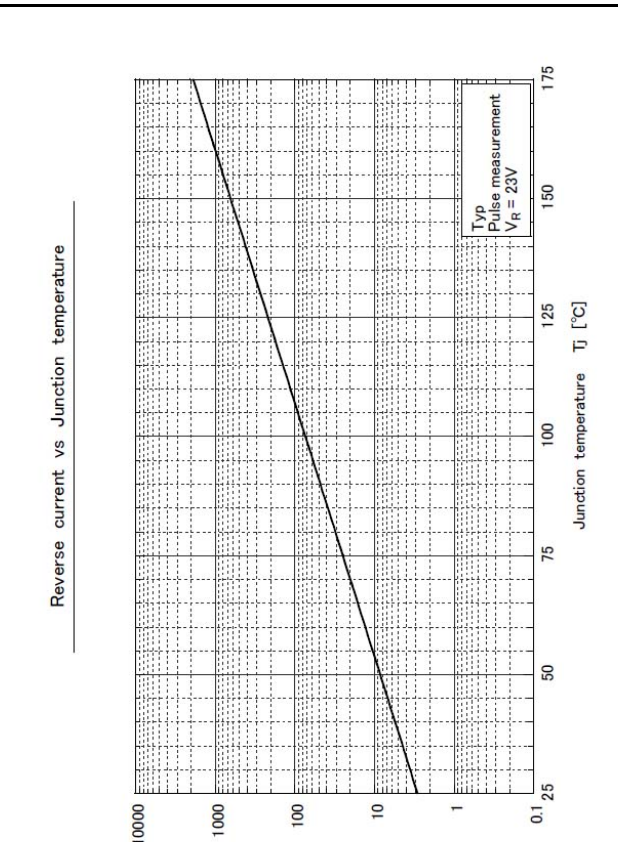
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Breakdown voltage	V_{BR}	IR=1mA, Pulse measurement	25		29	V
Reverse current	I_R	VR=23V, Pulse measurement			5	μA
Electrostatic discharge capability	V_{ESD}	C=330pF, R=330Ω, Polarity±, Aerial discharge ※		30		kV
Thermal resistance	Rth(j-l)	Junction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

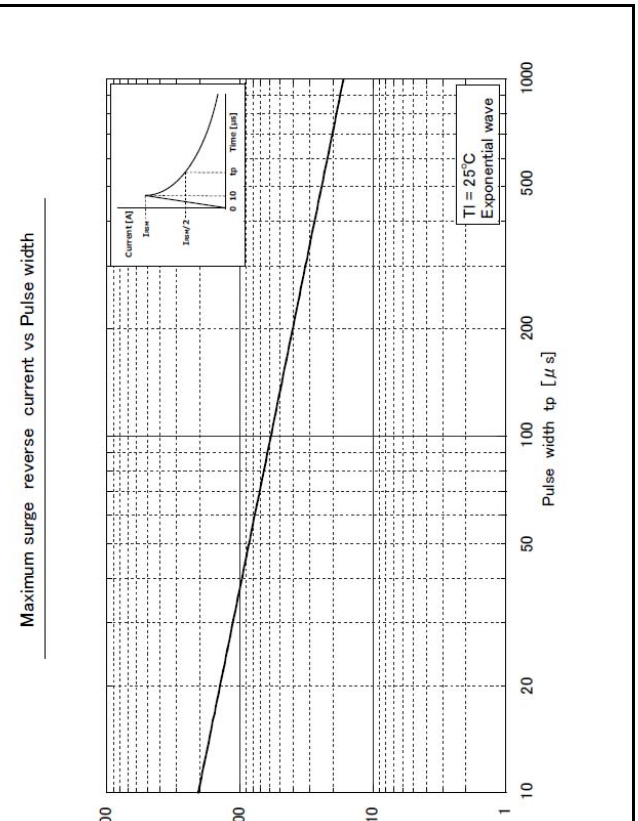
※ :See the original Specifications

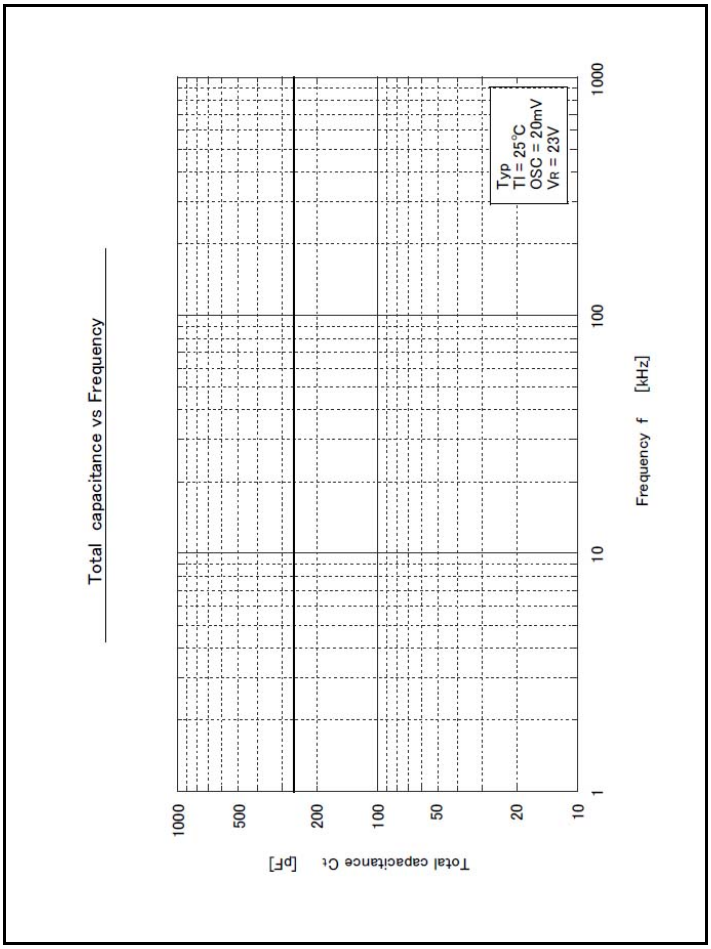
CHARACTERISTIC DIAGRAMS

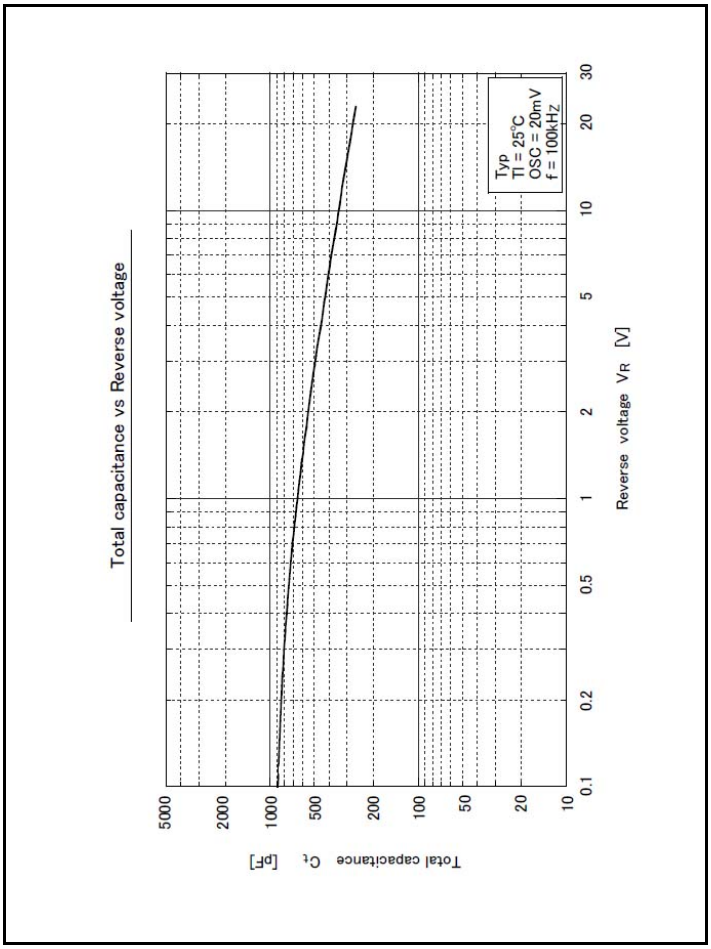


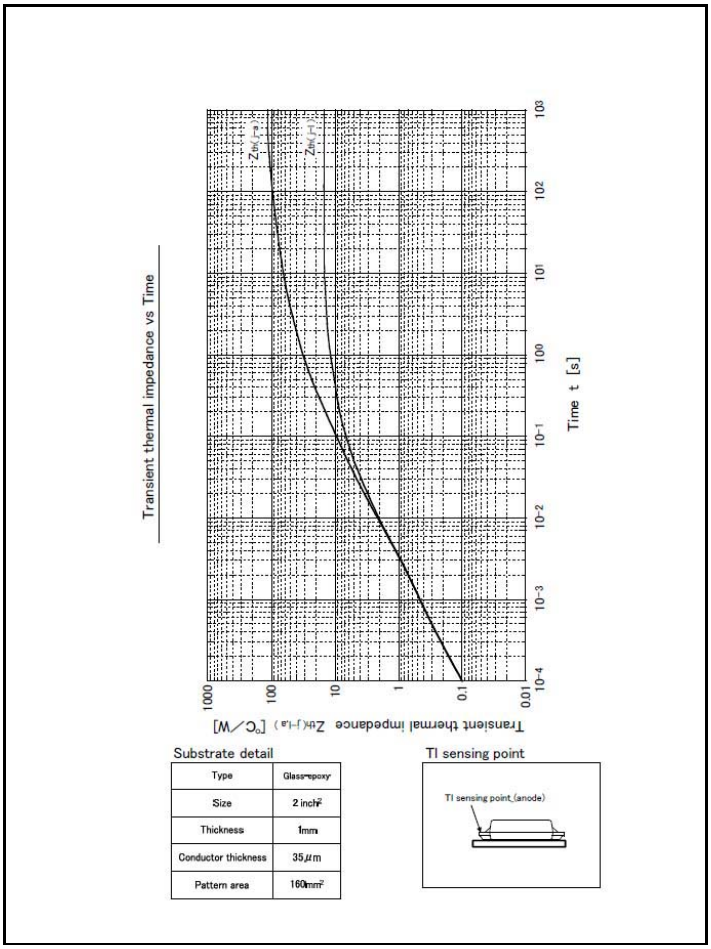


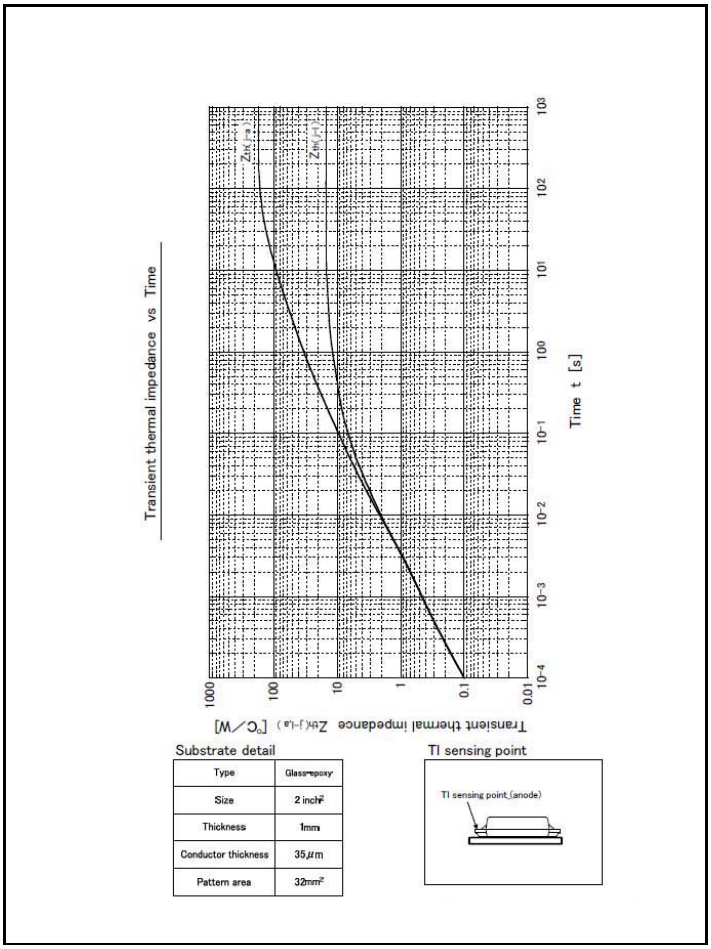





Total capacitance vs Frequency
Typ
Tl = 25°C
OSC = 20mV
VR = 23V
Total capacitance Ct [pF]
Frequency f [kHz]


Total capacitance vs Reverse voltage
Typ
Tl = 25°C
OSC = 20mV
f = 100kHz
Total capacitance Ct [pF]
Reverse voltage VR [V]


Transient thermal impedance vs Time
Transient thermal impedance Zth(j-a) [°C/W]
Time t [s]
Substrate detail
Type Glass-epoxy
Size 2 inch²
Thickness 1mm
Conductor thickness 35μm
Pattern area 160mm²
Tl sensing point
Tl sensing point (anode)


Transient thermal impedance vs Time
Transient thermal impedance Zth(j-a) [°C/W]
Time t [s]
Substrate detail
Type Glass-epoxy
Size 2 inch²
Thickness 1mm
Conductor thickness 35μm
Pattern area 32mm²
Tl sensing point
Tl sensing point (anode)

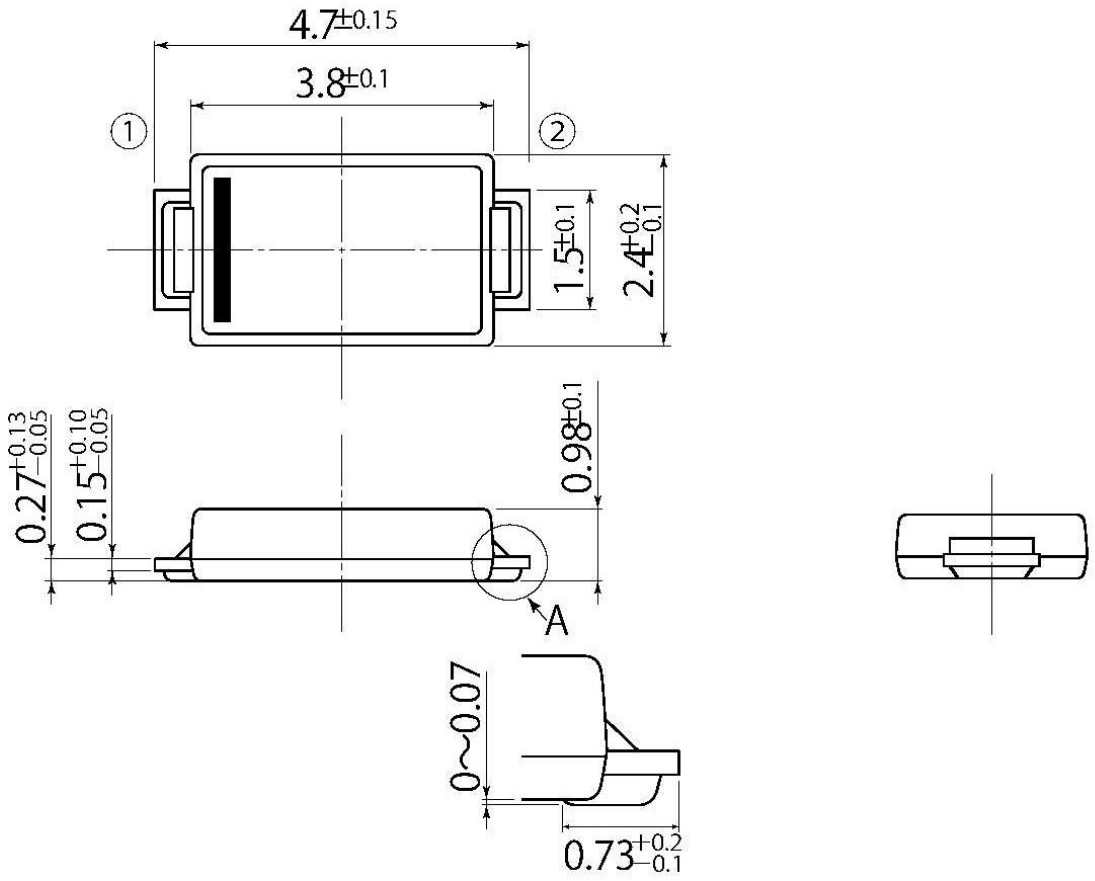
Outline Dimensions

unit:mm

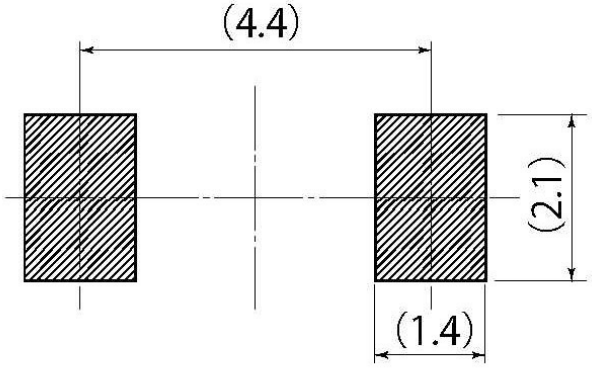
scale: 10/1

B5

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



Detail A



Referential Soldering Pad

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

Notes

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