

D3CE6ST  
Schottky Barrier Diodes  
60V, 3A

Feature

- Ultra-small SMD
- Ultra thin PKG
- Tj=175°C
- Ultra low I<sub>R</sub>
- 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 temperrature            | Tstg                |   | -55 to 175 | °C   |
| Junction temperature            | Tj                  |   | -55 to 175 | °C   |
| Repetitive peak reverse voltage | V <sub>RRM</sub>    |   | 60         | V    |
| Average forward current         | I <sub>F</sub> (AV) | 50Hz sine wave, Resistance load, Tl=131°C   | 3          | A    |
| Average forward current         | I <sub>F</sub> (AV) | 50Hz, Sine wave, Resistance load, Ta=25°C ※ | 1.95       | A    |
| Surge forward current           | I <sub>FSM</sub>    | 50Hz, Sine wave, Resistance load,Tj=25°C    | 90         | A    |

※ :See the original Specifications

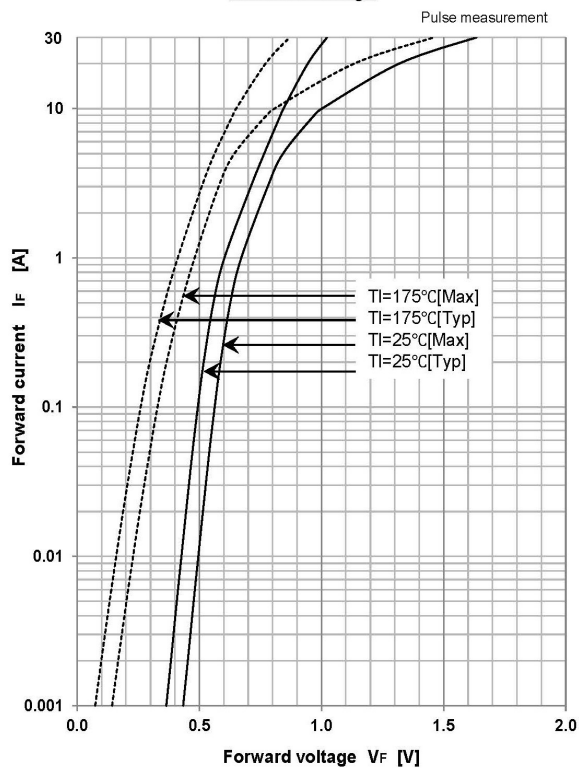
Electrical Characteristics (unless otherwise specified : Tl=25°C)

| Item               | Symbol         | Conditions                | Ratings |     |       | Unit |
|--------------------|----------------|---------------------------|---------|-----|-------|------|
|                    |                |                           | MIN     | TYP | MAX   |      |
| Forward voltage    | V <sub>F</sub> | IF=3A, Pulse measurement  |         |     | 0.78  | V    |
| Reverse current    | I <sub>R</sub> | VR=60V, Pulse measurement |         |     | 0.008 | mA   |
| Total capacitance  | Ct             | f=1MHz, VR=10V            |         | 82  |       | pF   |
| Thermal resistance | Rth(j-l)       | Junction to lead※         |         |     | 20    | °C/W |
| Thermal resistance | Rth(j-a)       | Junction to ambient ※     |         |     | 120   | °C/W |

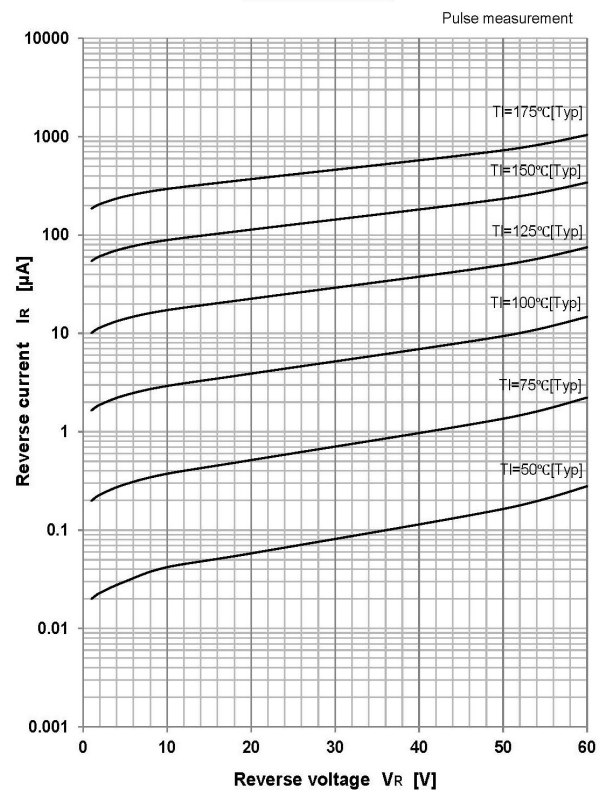
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS

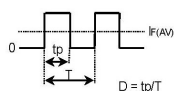
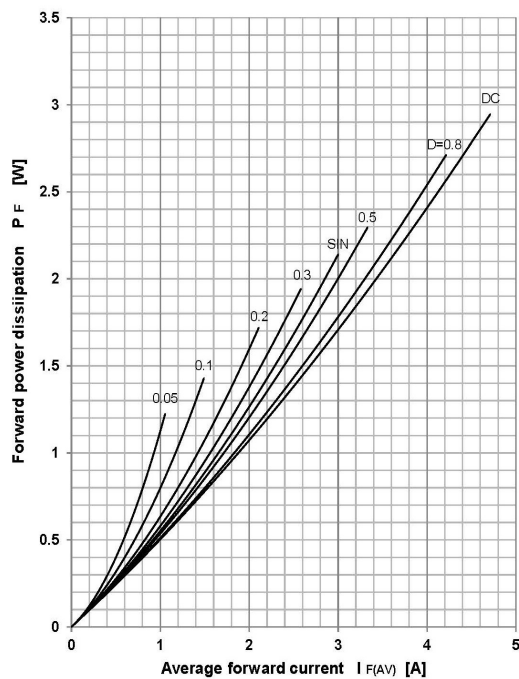
**Forward voltage**



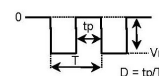
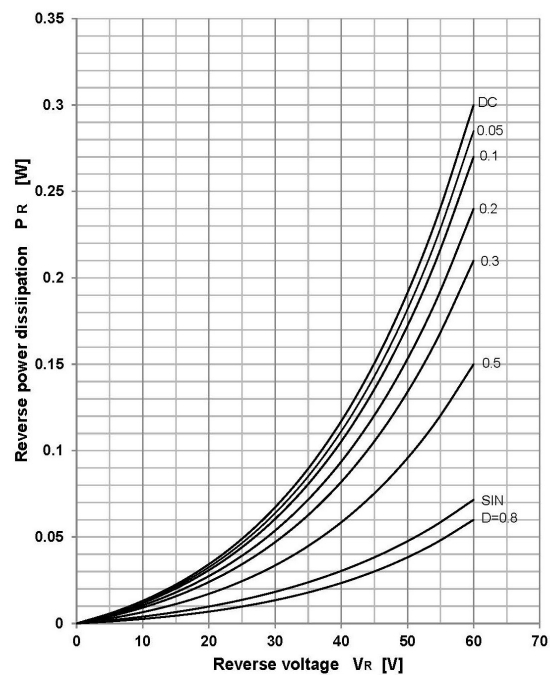
**Reverse current**

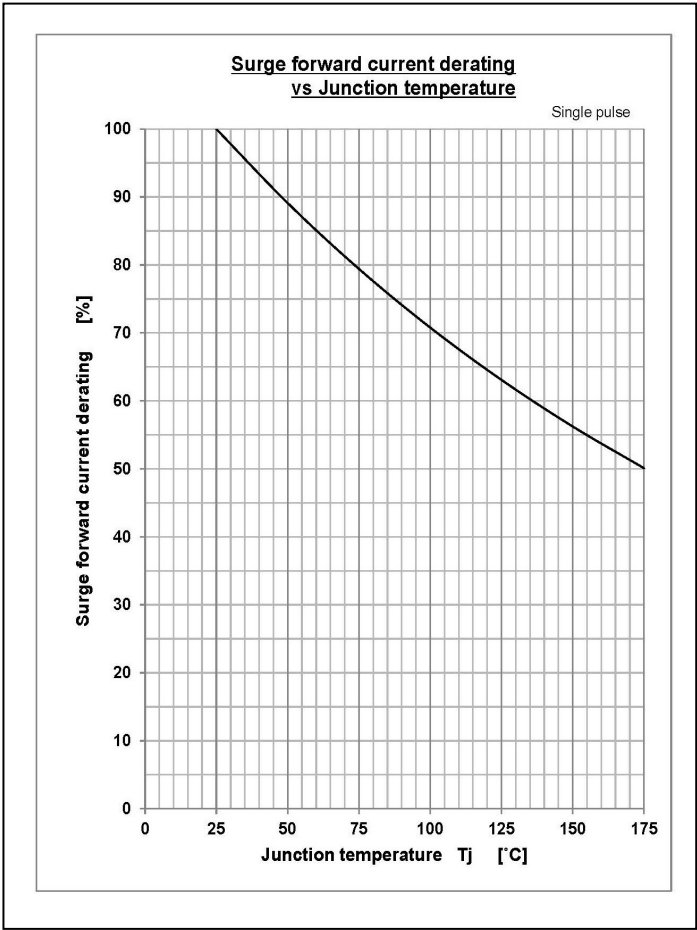
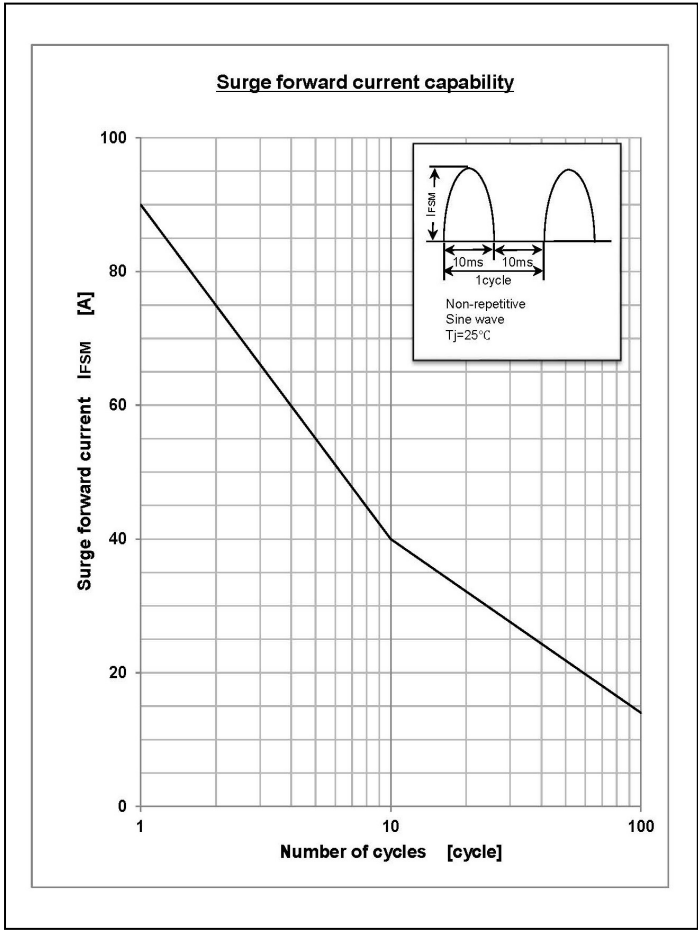
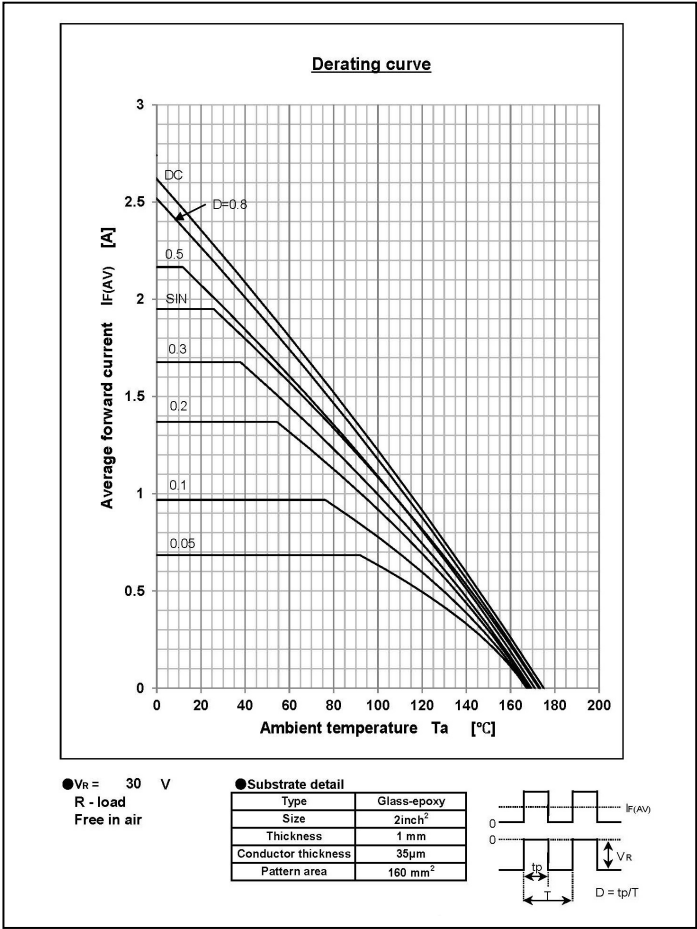
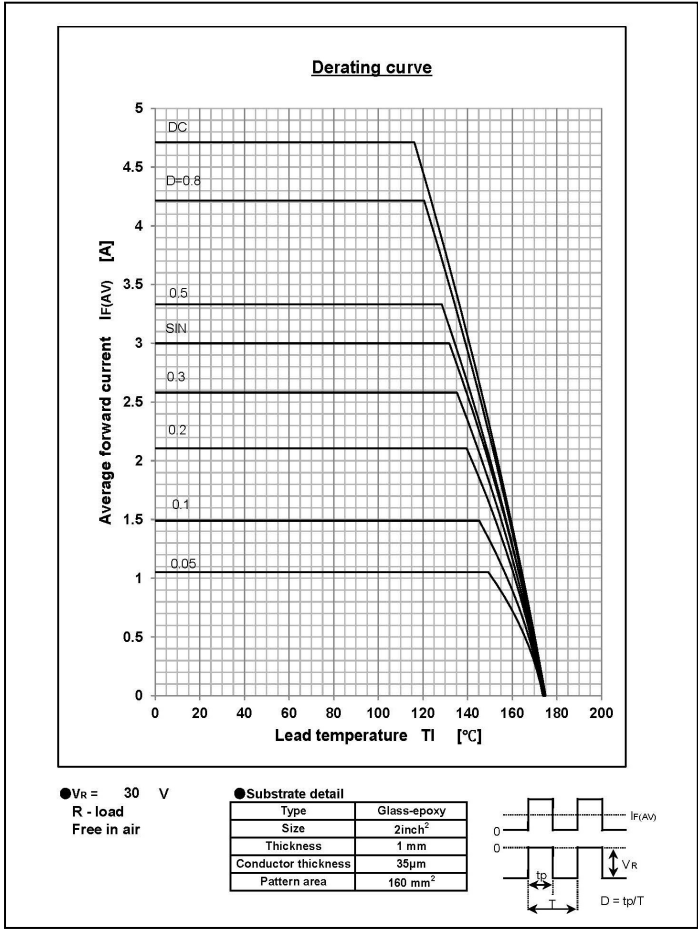


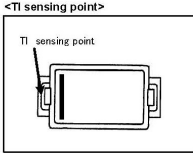
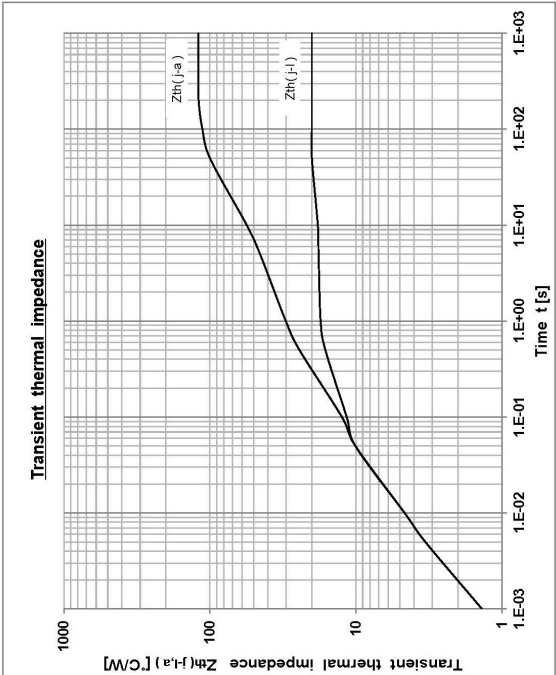
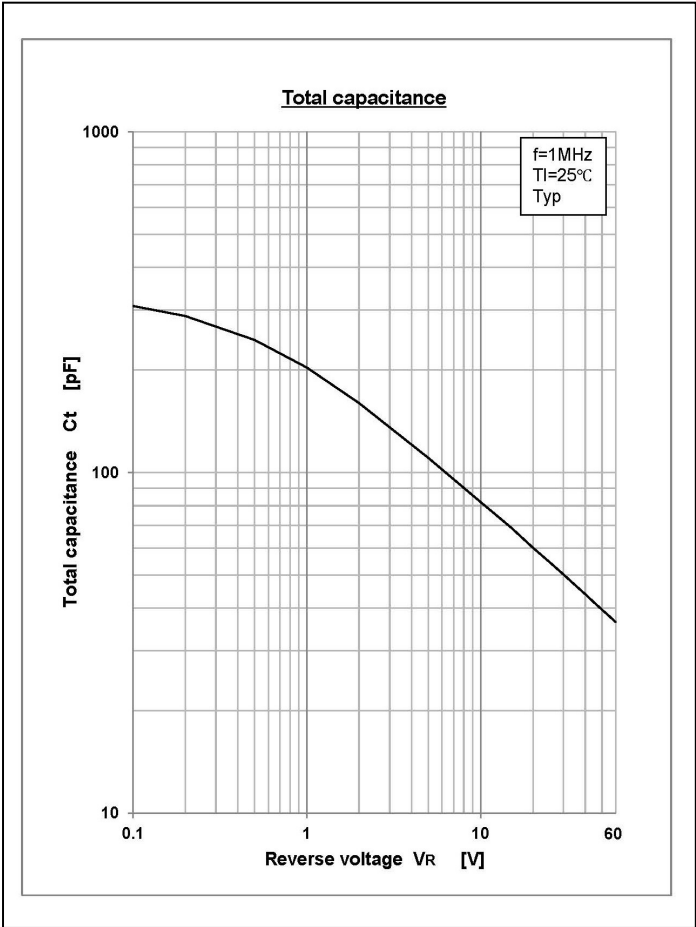
**Forward power dissipation**



**Reverse power diagram**







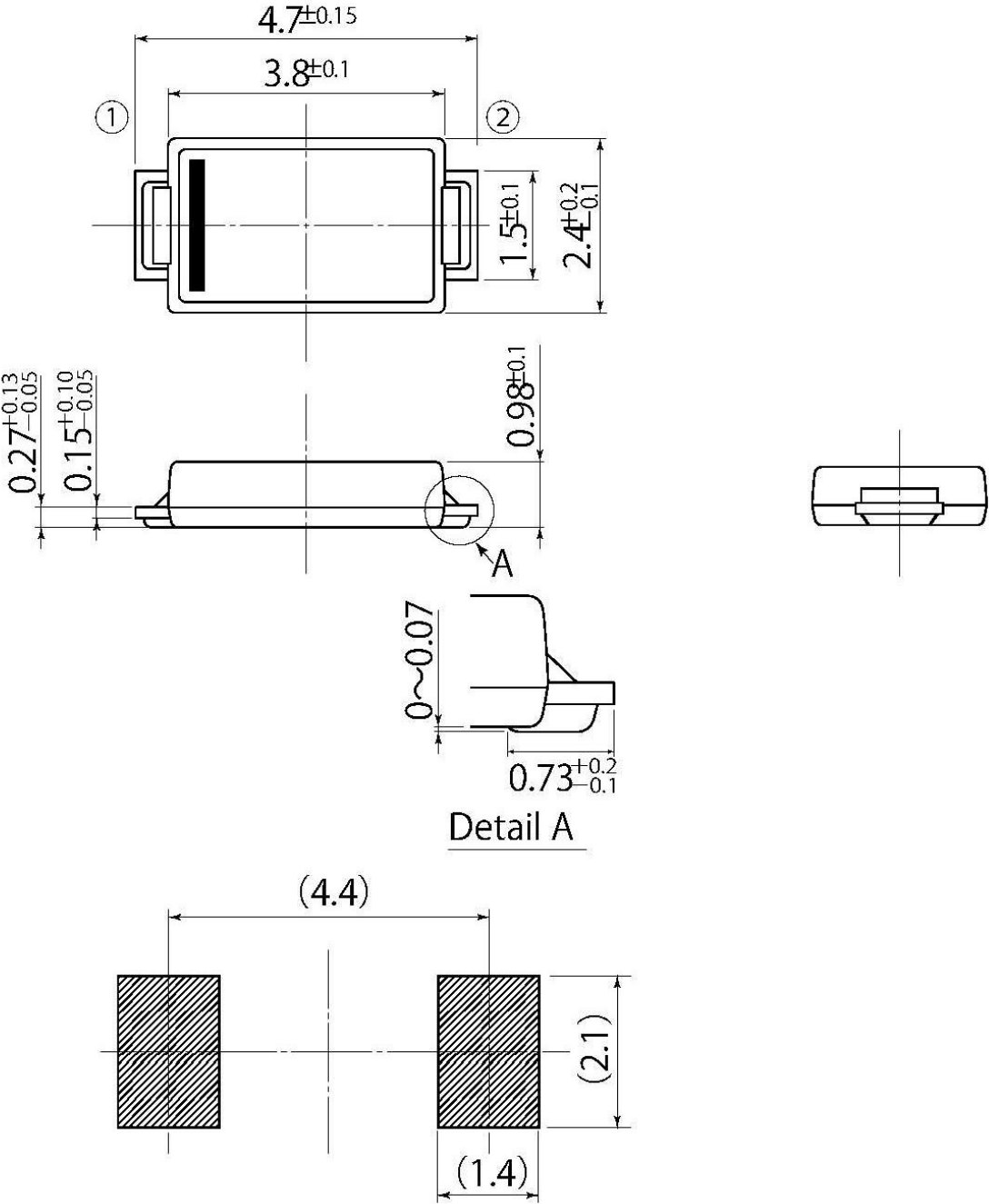
● Substrate detail

|                     |                     |
|---------------------|---------------------|
| Type                | Glass-epoxy         |
| Size                | 2inch <sup>2</sup>  |
| Thickness           | 1 mm                |
| Conductor thickness | 35 $\mu\text{m}$    |
| Pattern area        | 160 mm <sup>2</sup> |

Specification No.

B5

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



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

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