

D3CE6S

Schottky Barrier Diodes

60V, 3A

Feature

- Ultra-small SMD
- Ultra thin PKG
- Low V_F
- 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 temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	VRRM		60	V
Repetitive peak surge reverse voltage	VRRSM	Pulse width 0.5ms, duty=1/40	65	V
Average forward current	IF(AV)	50Hz sine wave, Resistance load, Tl=112°C	3	A
Average forward current	IF(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	1.4	A
Average forward current	IF(AV)	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C ※	0.9	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	100	A

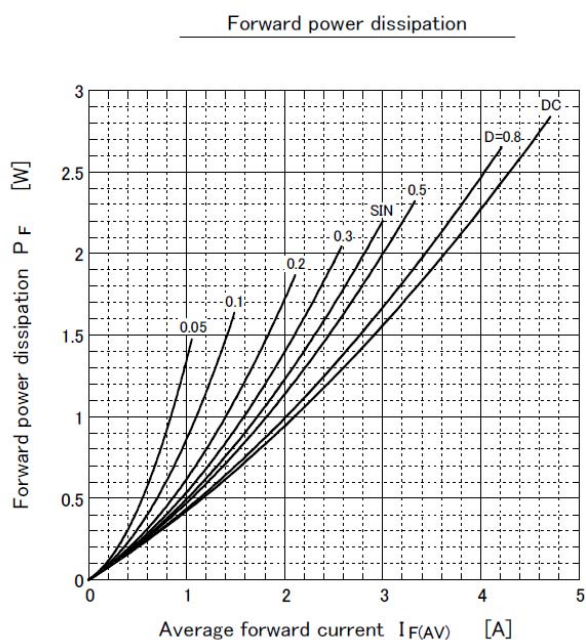
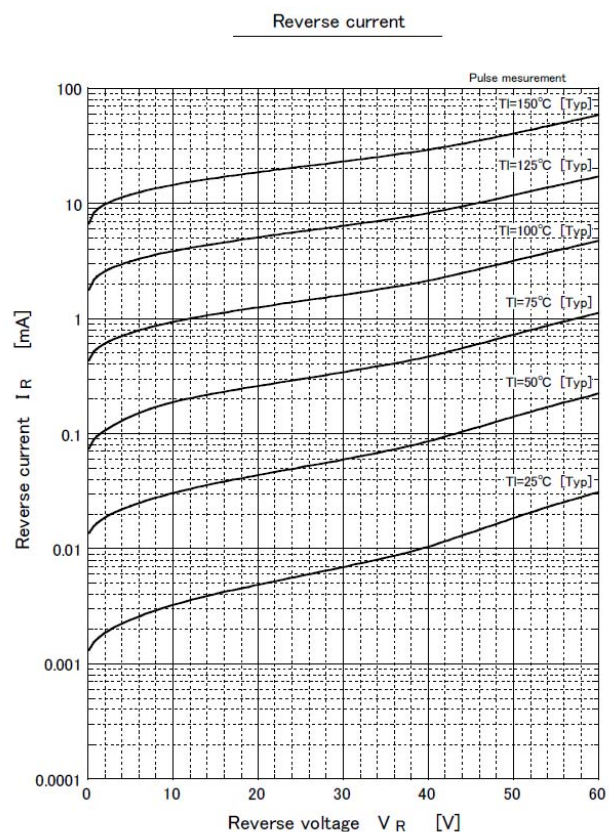
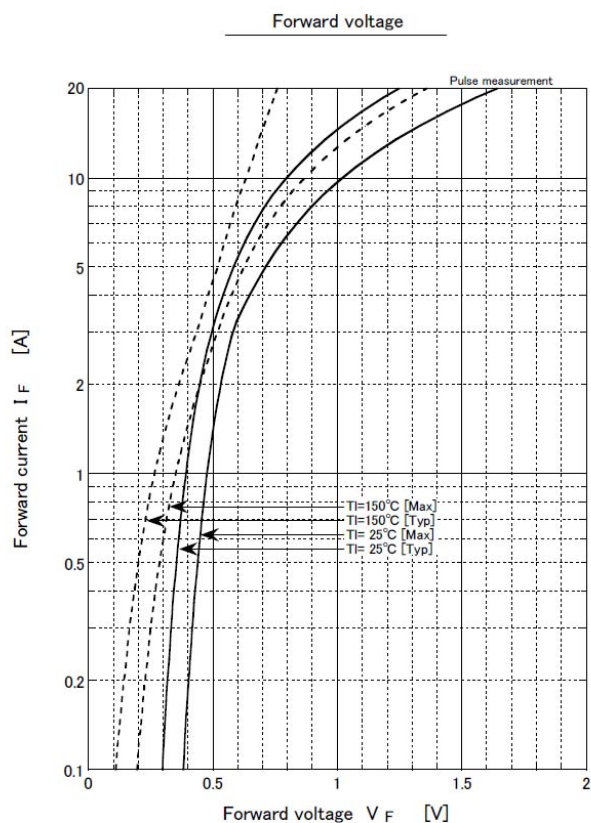
※ :See the original Specifications

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

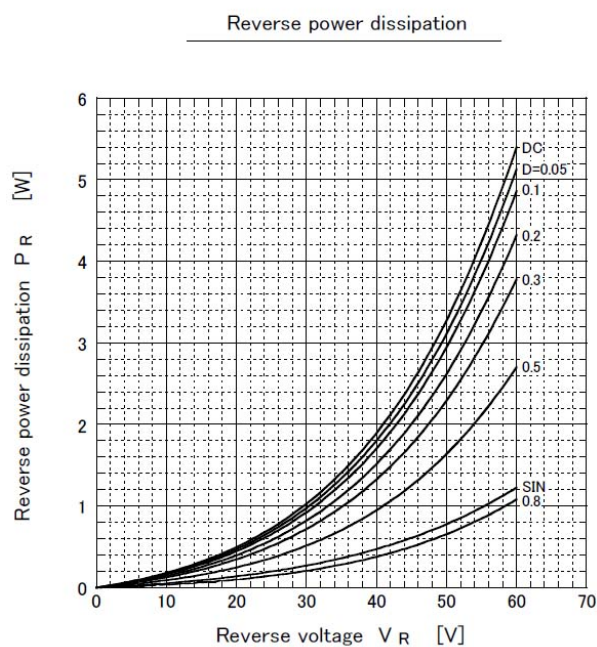
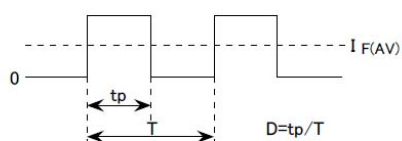
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=3A, Pulse measurement			0.58	V
Reverse current	I_R	VR=60V, Pulse measurement			0.3	mA
Total capacitance	Ct	f=1MHz, VR=10V		110		pF
Thermal resistance	Rth(j-l)	Junction to lead			15	°C/W
Thermal resistance	Rth(j-a)	Junction to 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

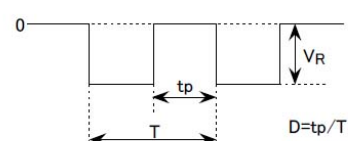
CHARACTERISTIC DIAGRAMS



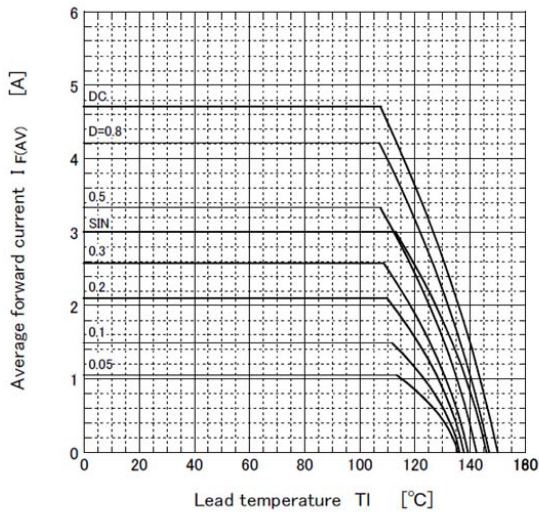
● $T_J = 150^\circ\text{C}$



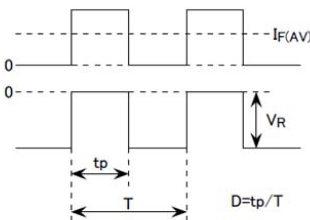
● $T_J = 150^\circ\text{C}$



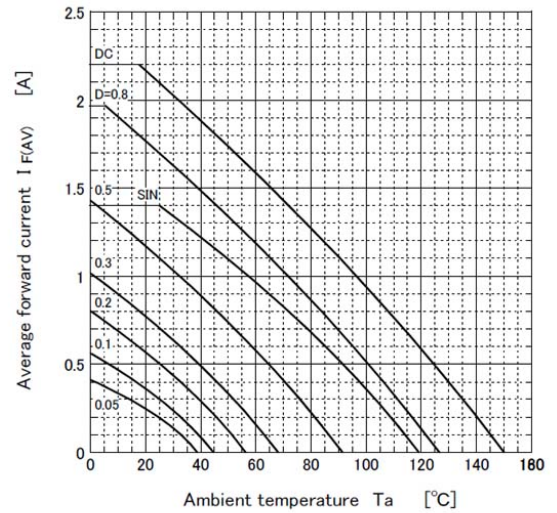
Derating curve



● $V_R = 30V$
R-load
Free in air



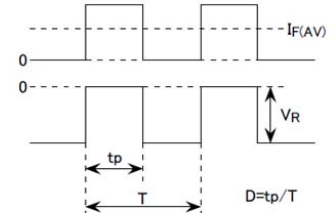
Derating curve



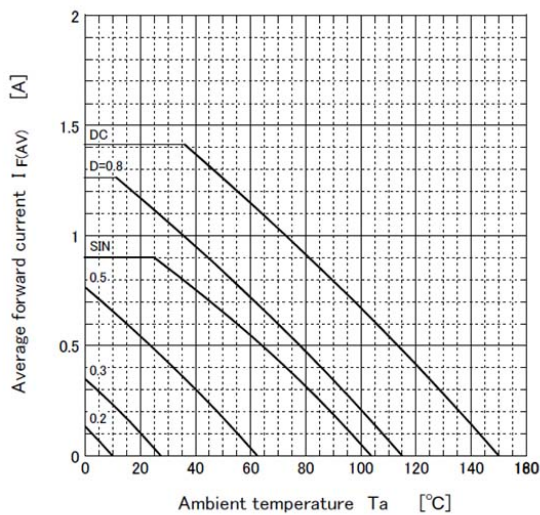
● $V_R = 30V$
R-load
Free in air

● Substrate detail

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



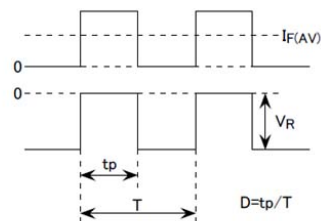
Derating curve



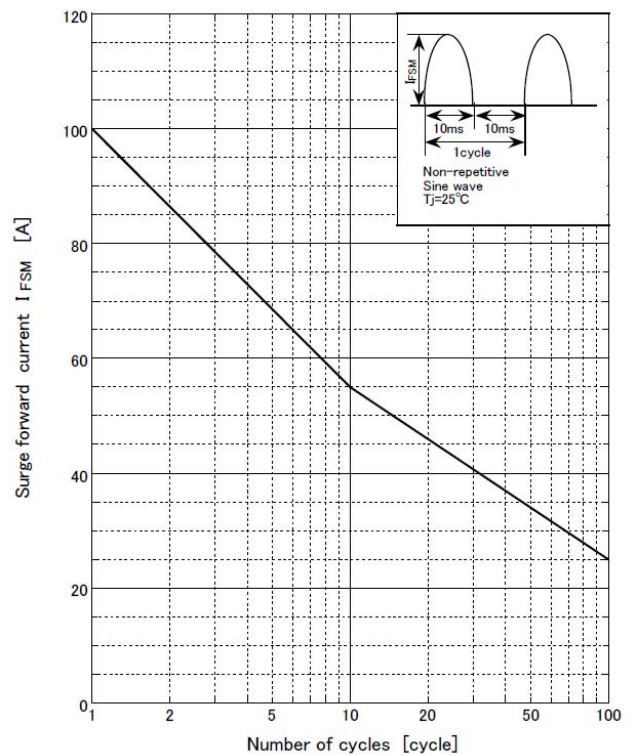
● $V_R = 30V$
R-load
Free in air

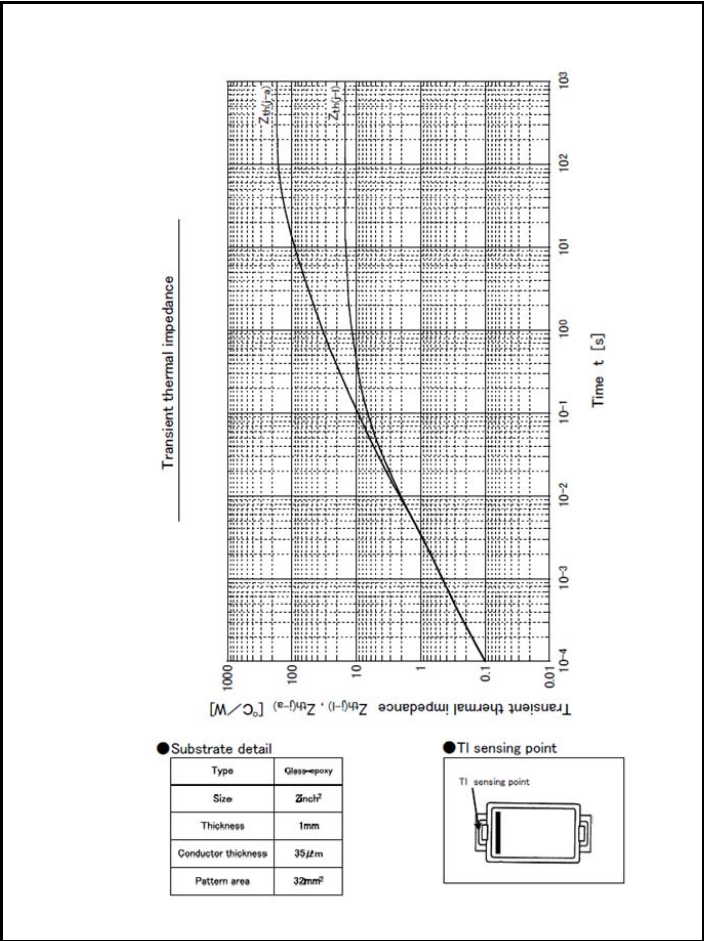
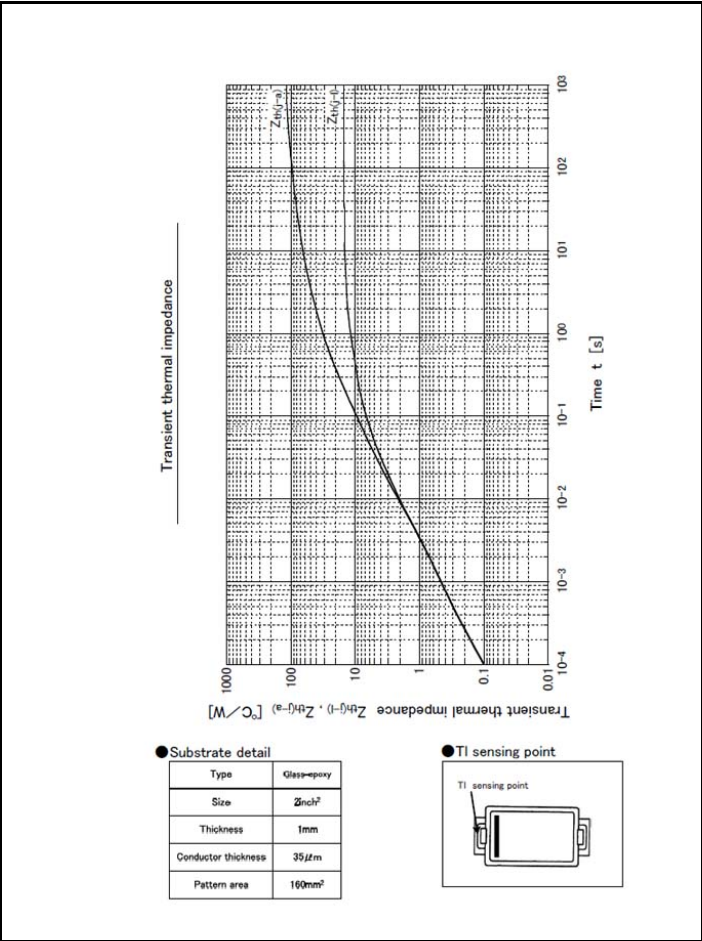
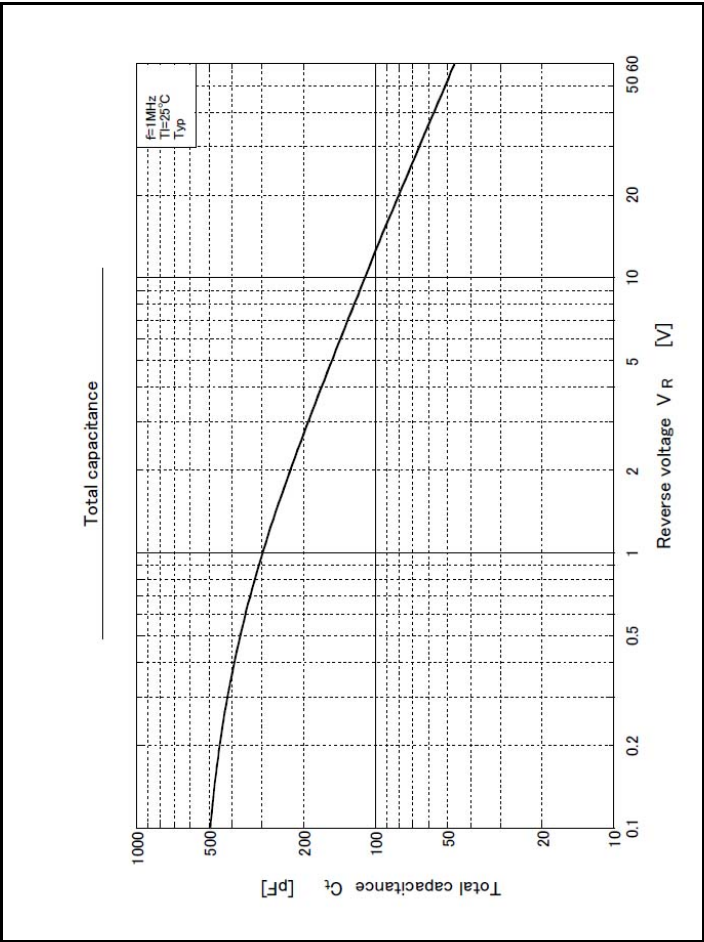
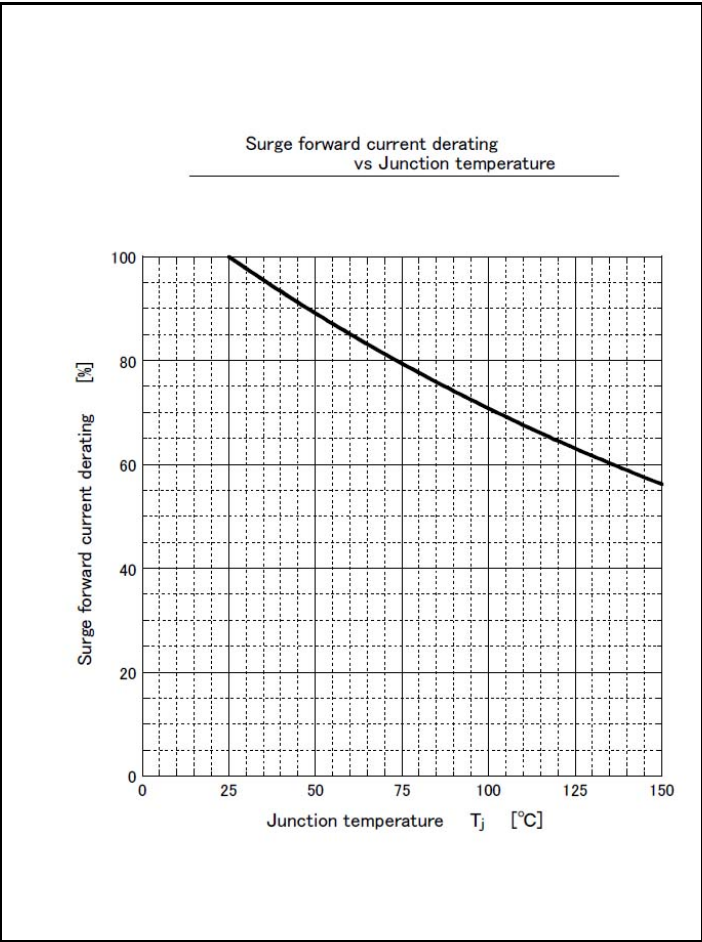
● Substrate detail

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



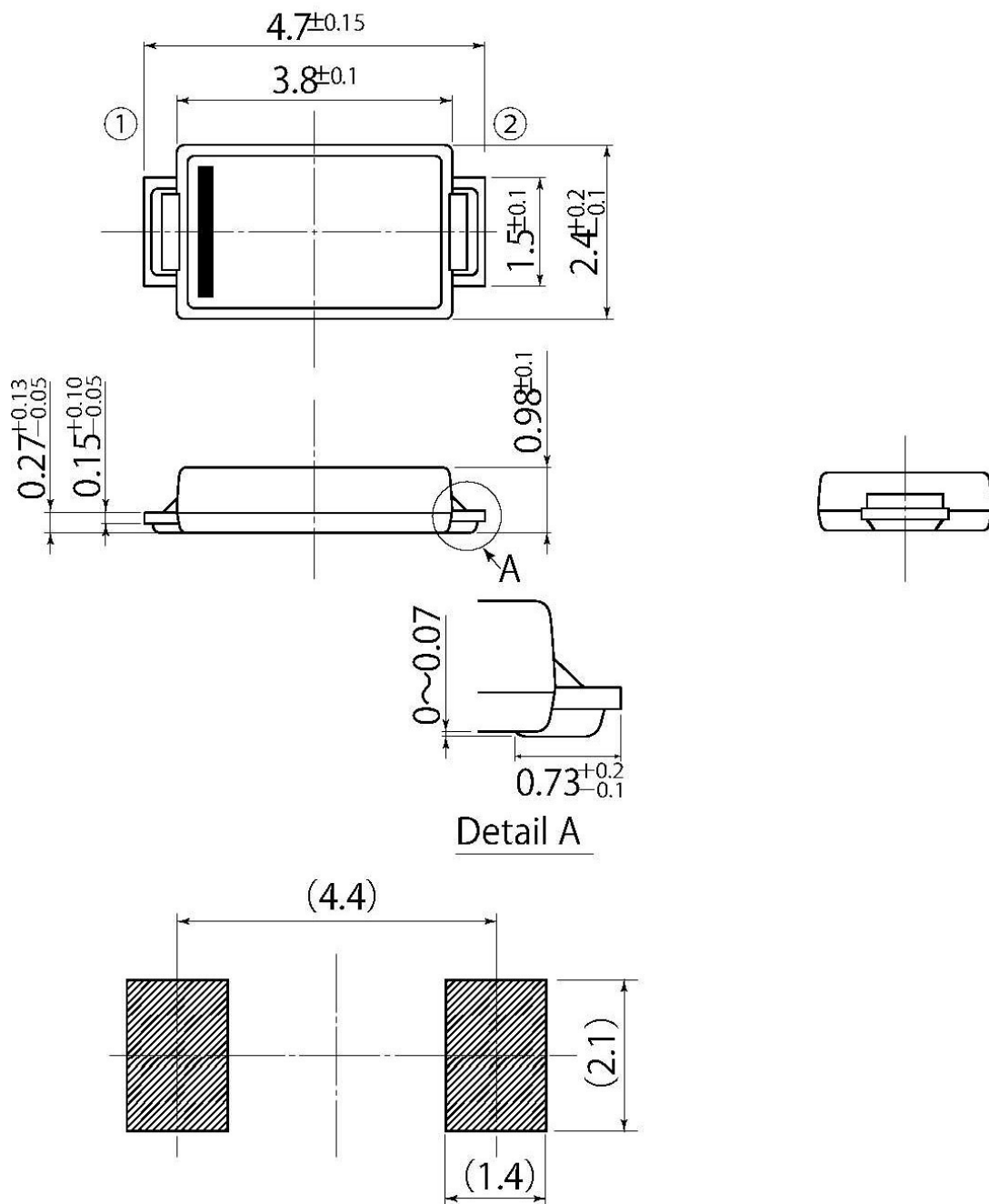
Surge forward current capability





B5

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



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

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