

# D3CE60V

## General Rectifying Diodes

600V, 3.0A

### Feature

- Ultra-small SMD
- Ultra-thin PKG=1.0mm
- Available for automotive use
- Pb free terminal
- RoHS:Yes

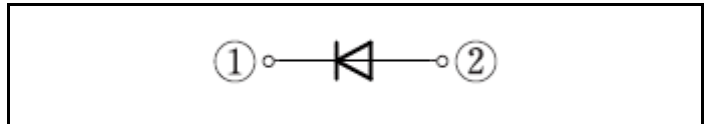
### OUTLINE

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	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		600	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Tl=101°C	3	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C *	1.15	A
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, On glass-epoxy substrate, Ta=25°C *	0.8	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	50	A
Surge forward current	I <sub>FSM1</sub>	tp=1ms, sine wave, Non-repetitive, peak value, Tj=25°C	110	A

\* : See the original Specifications

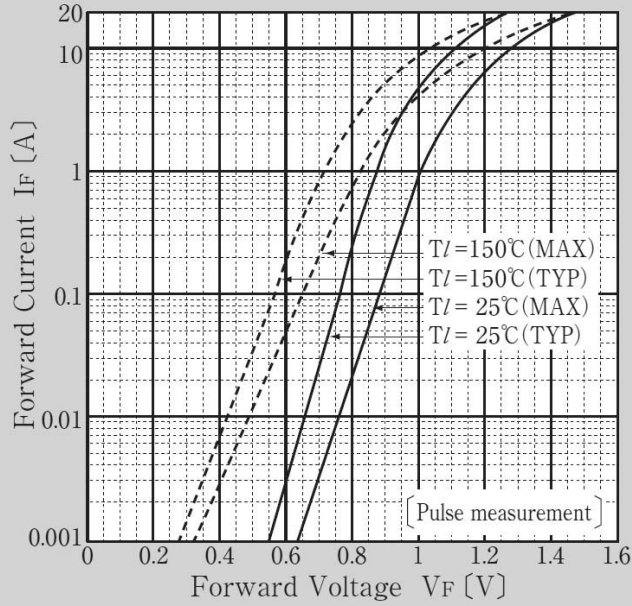
**Electrical Characteristics** (unless otherwise specified : Tl=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	$V_F$	$I_F=3A$ , Pulse measurement			1.1	V
Reverse current	$I_R$	$V_R=600V$ , Pulse measurement			10	$\mu A$
Thermal resistance	$R_{th(j-l)}$	Junction to lead			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	$^{\circ}C/W$

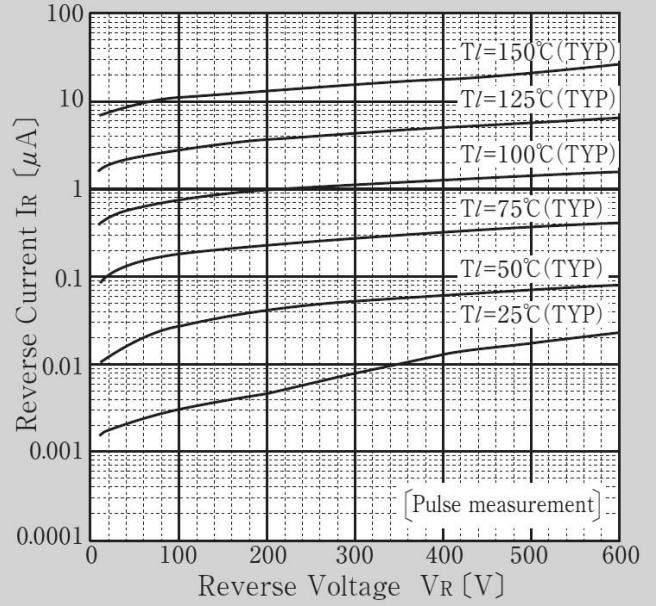
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

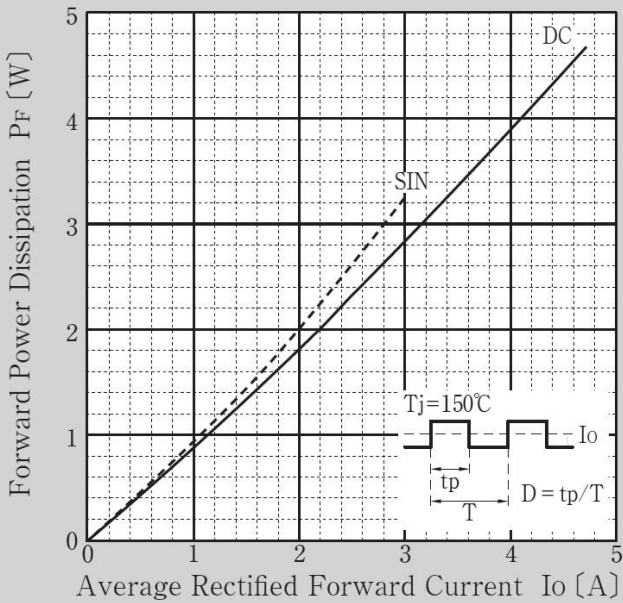
### Forward Voltage



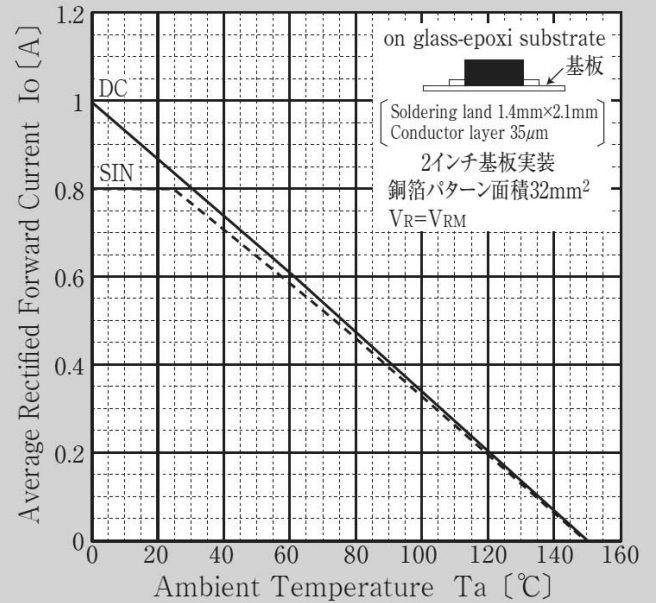
### Reverse Current

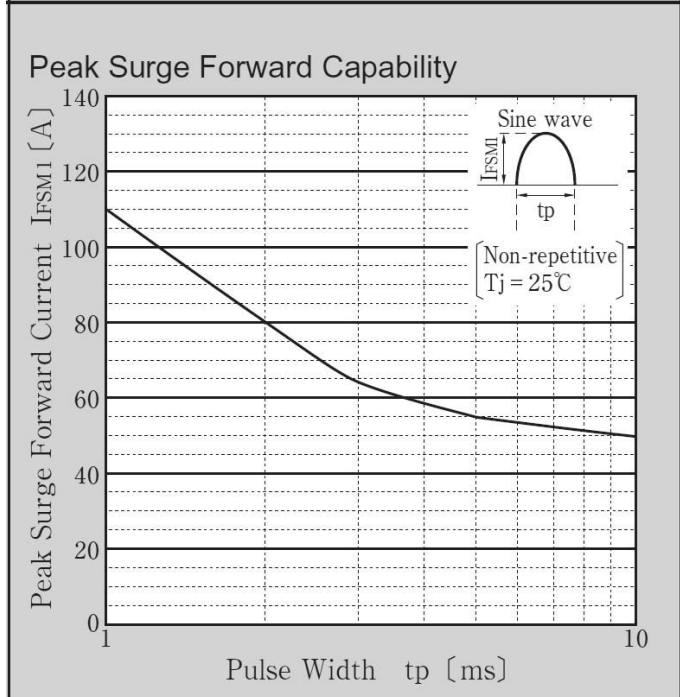
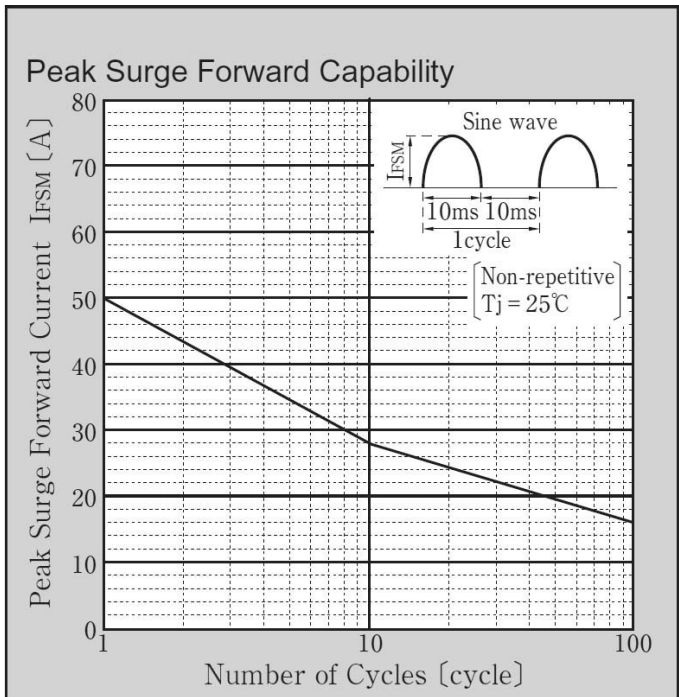
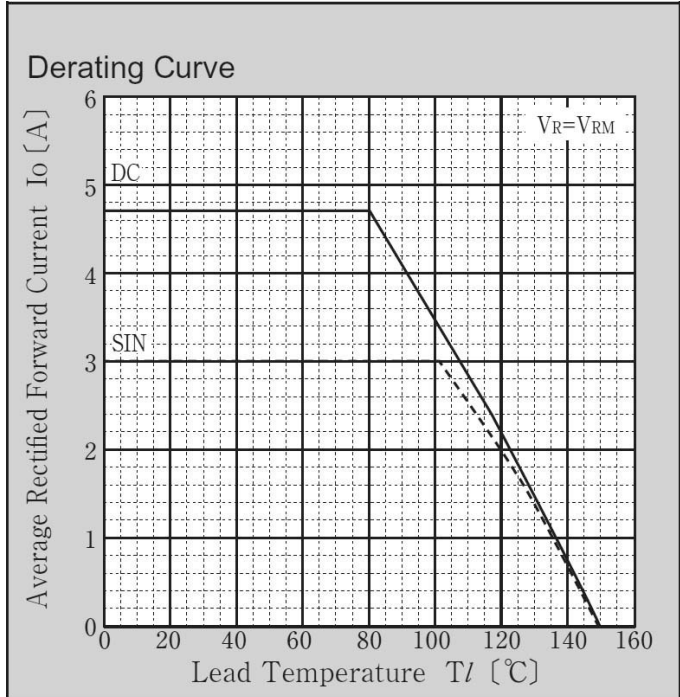
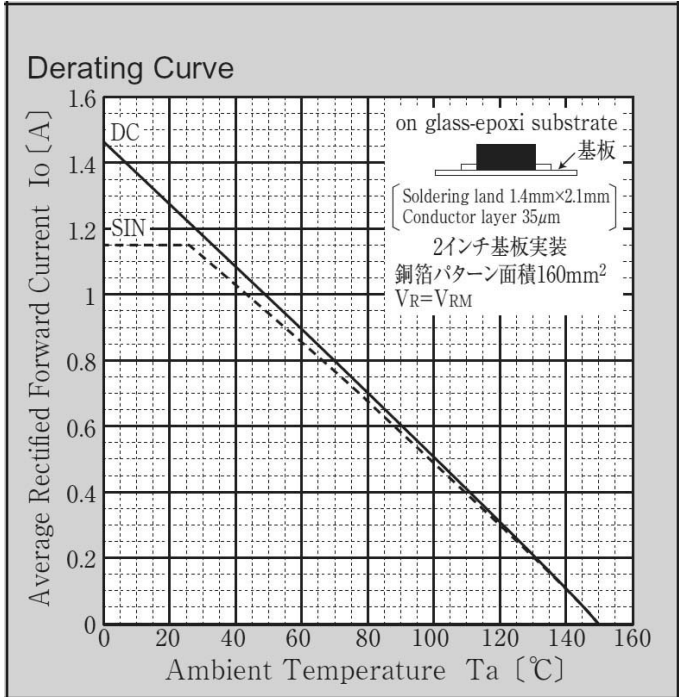


### Forward Power Dissipation

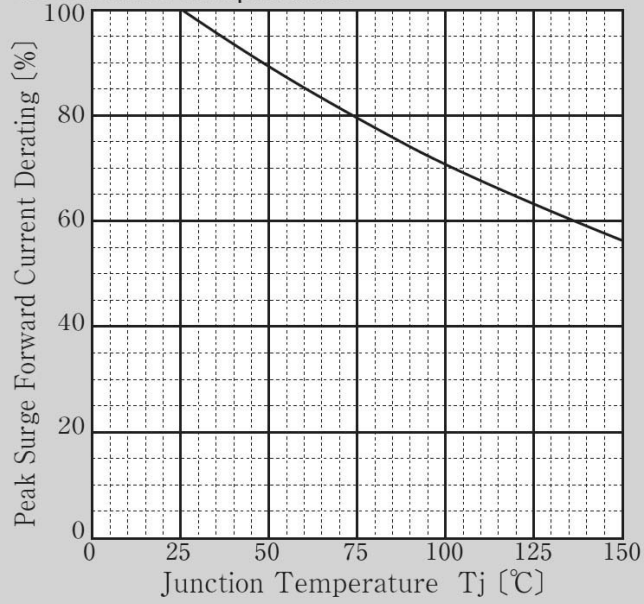


### Derating Curve

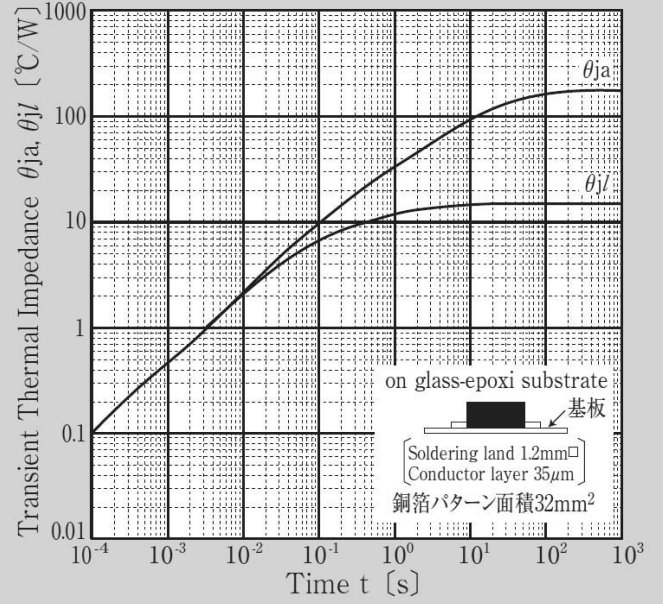




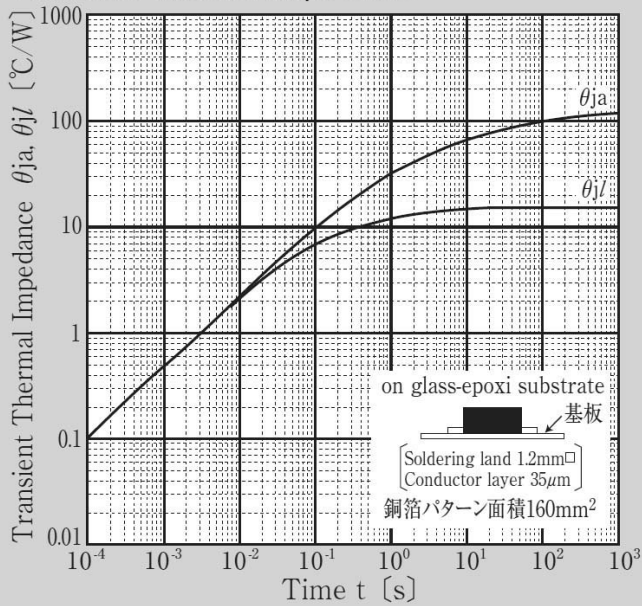
Peak Surge Forward Current Derating vs Junction Temperature



Transient Thermal Impedance

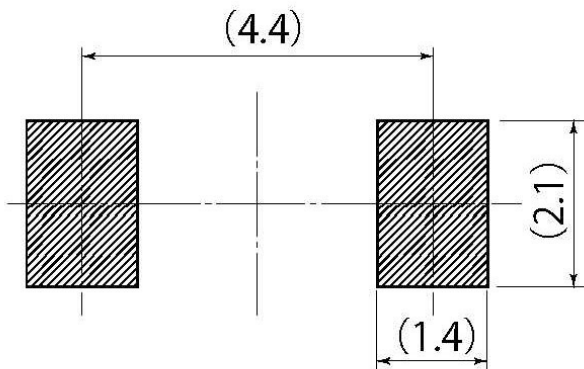
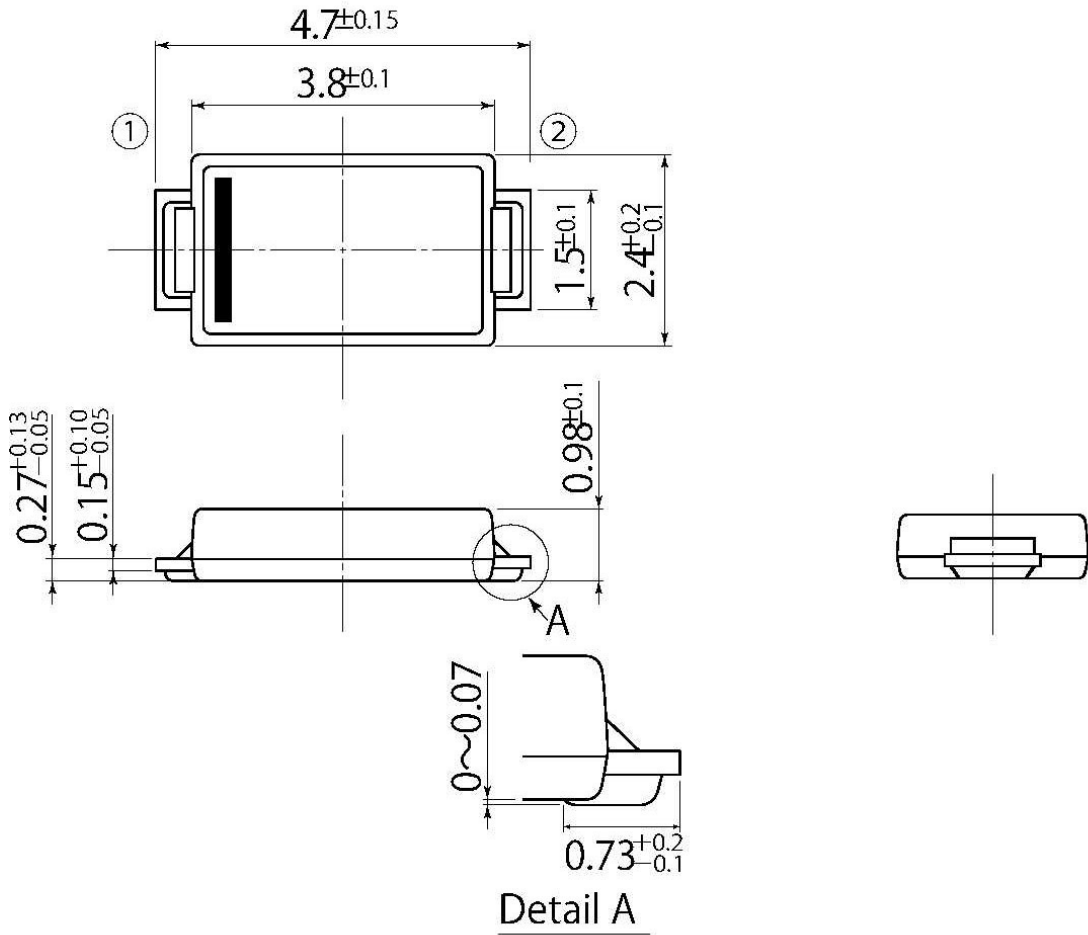


Transient Thermal Impedance



B5

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



Referential Soldering Pad

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

## Notes

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