

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

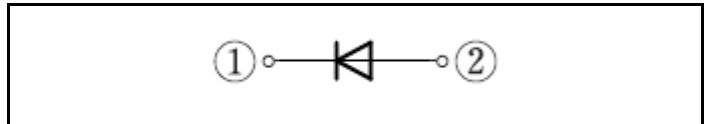
OUTLINE

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

※ : See the original Specifications

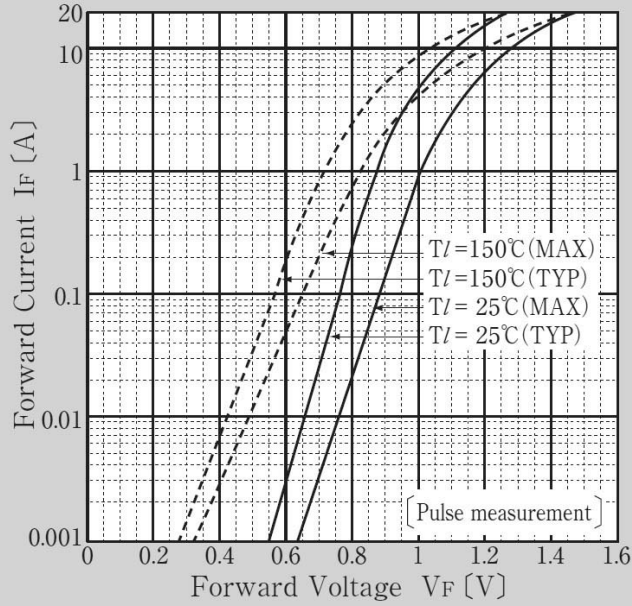
Electrical Characteristics (unless otherwise specified : Tl=25°C)

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	μA
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	$^{\circ}C/W$

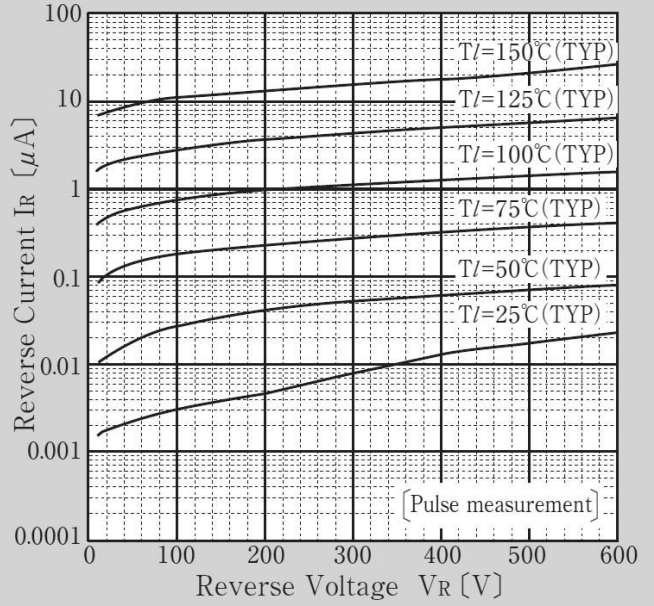
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

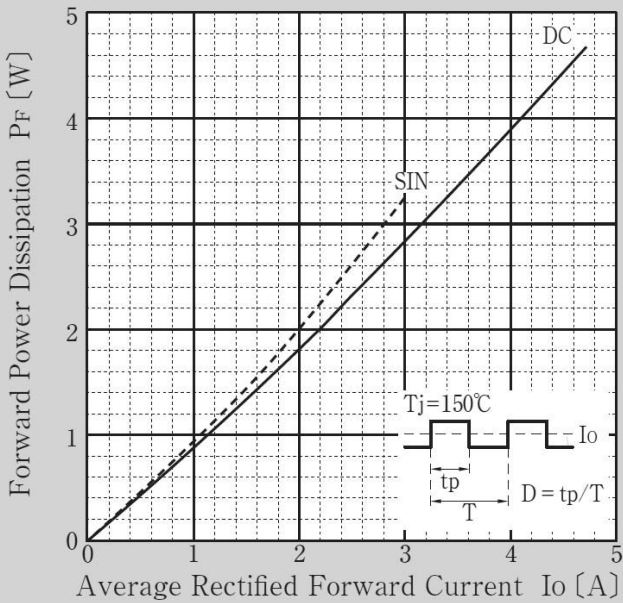
Forward Voltage



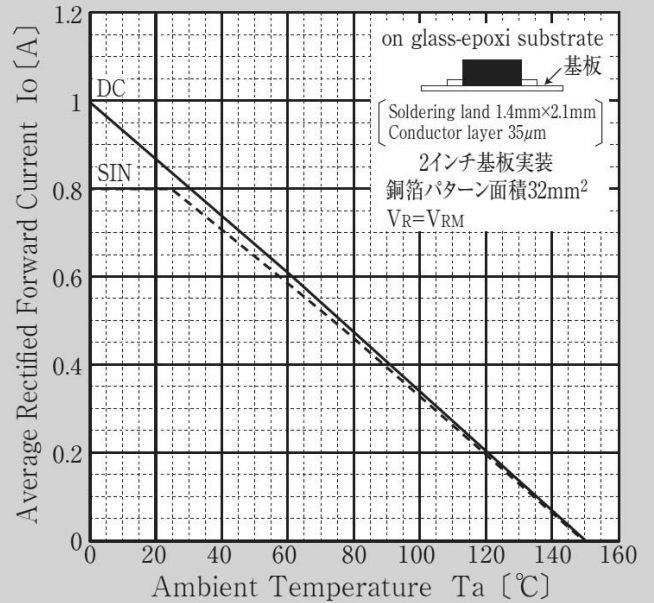
Reverse Current

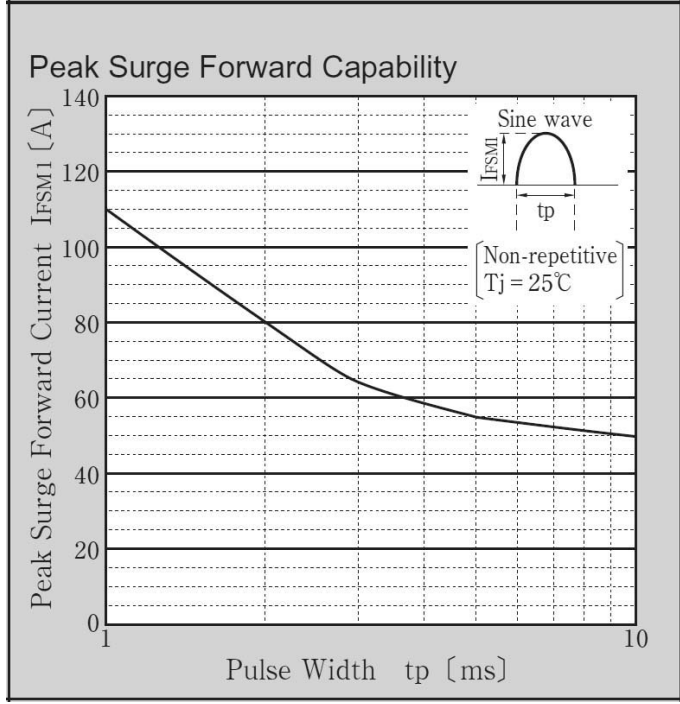
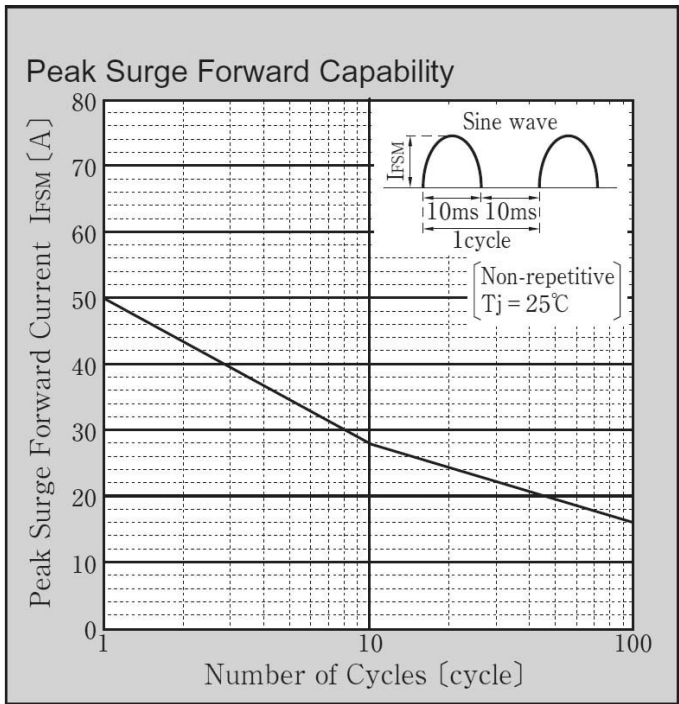
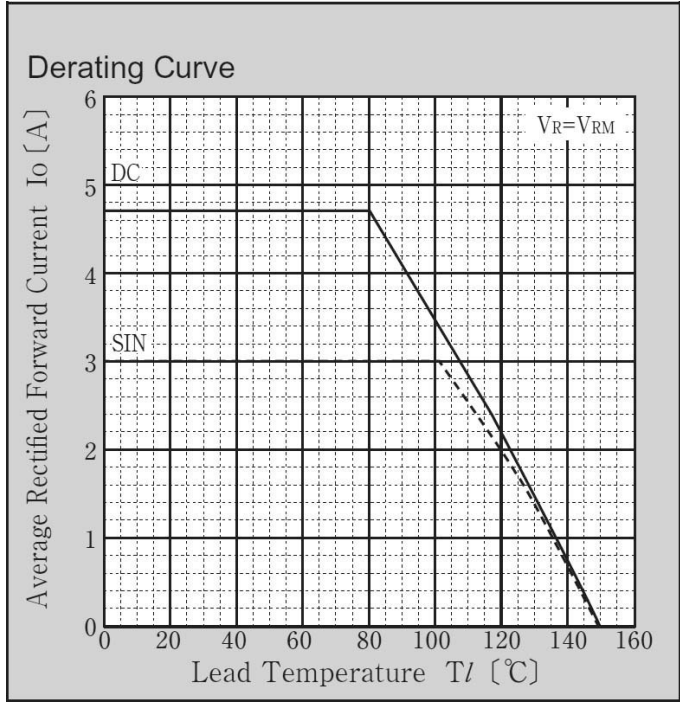
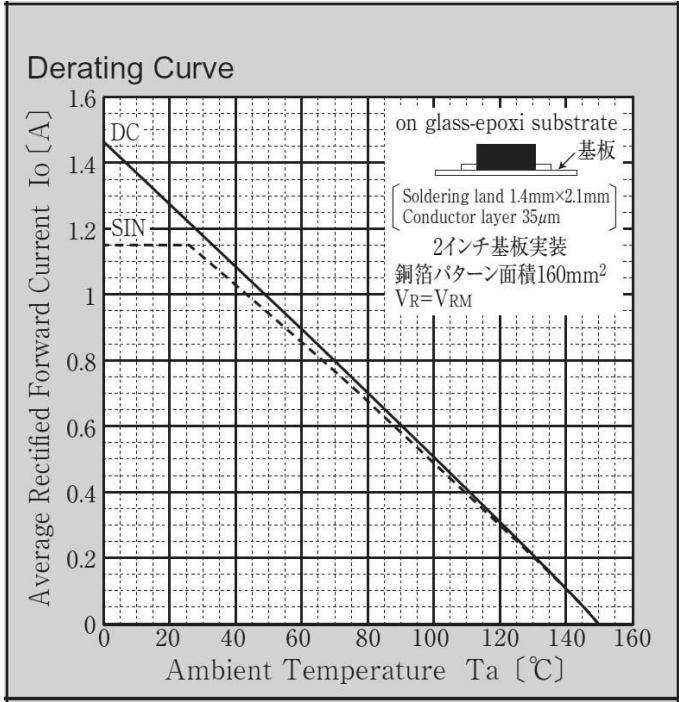


Forward Power Dissipation

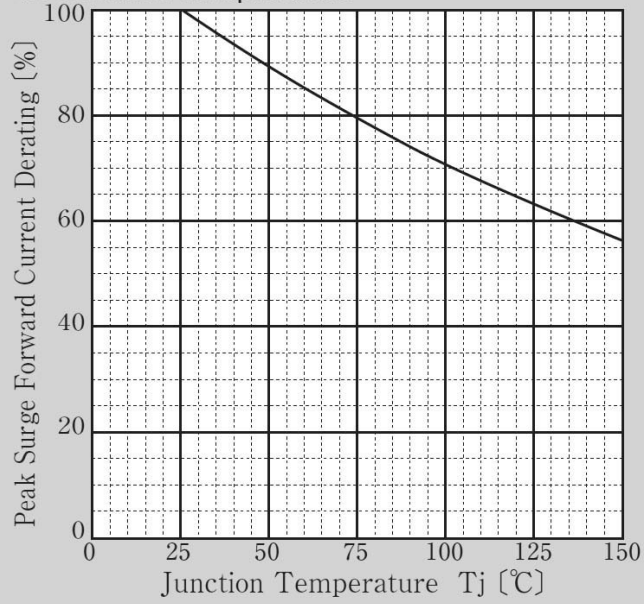


Derating Curve

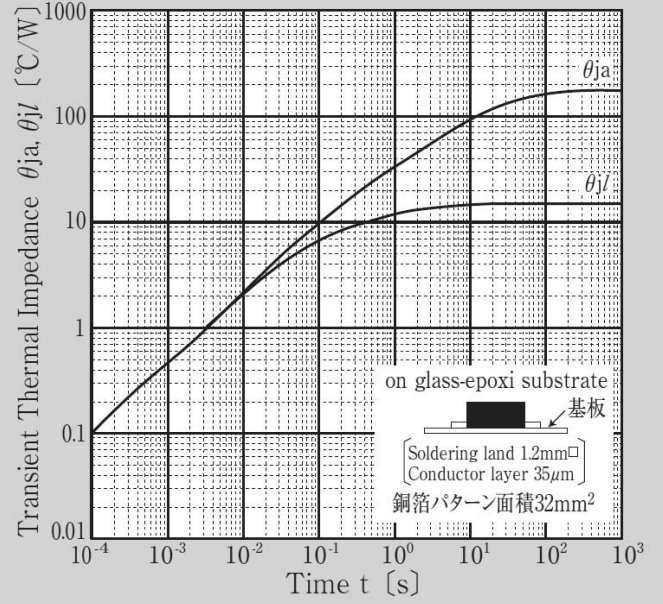




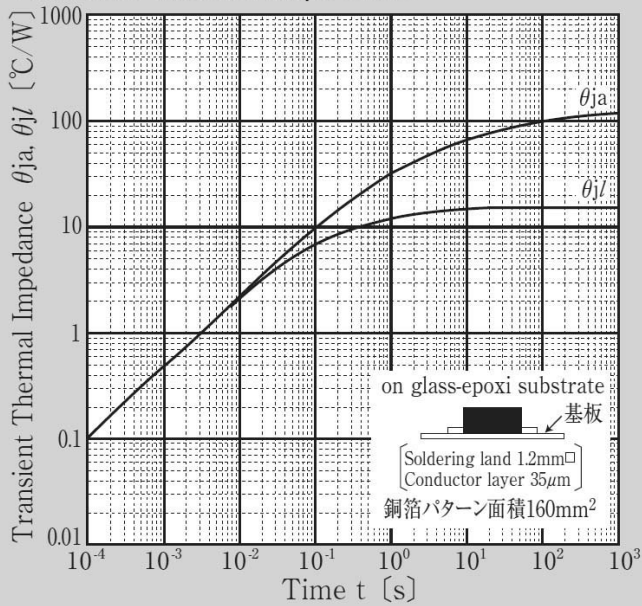
Peak Surge Forward Current Derating vs Junction Temperature



Transient Thermal Impedance

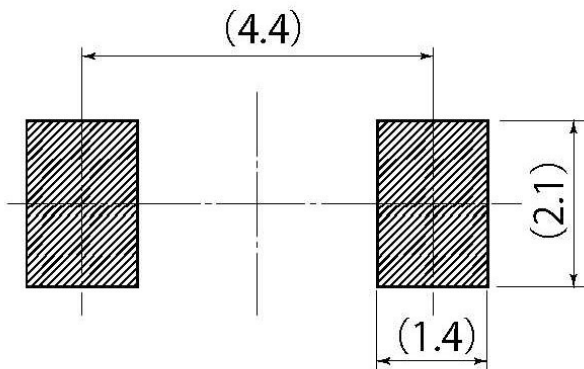
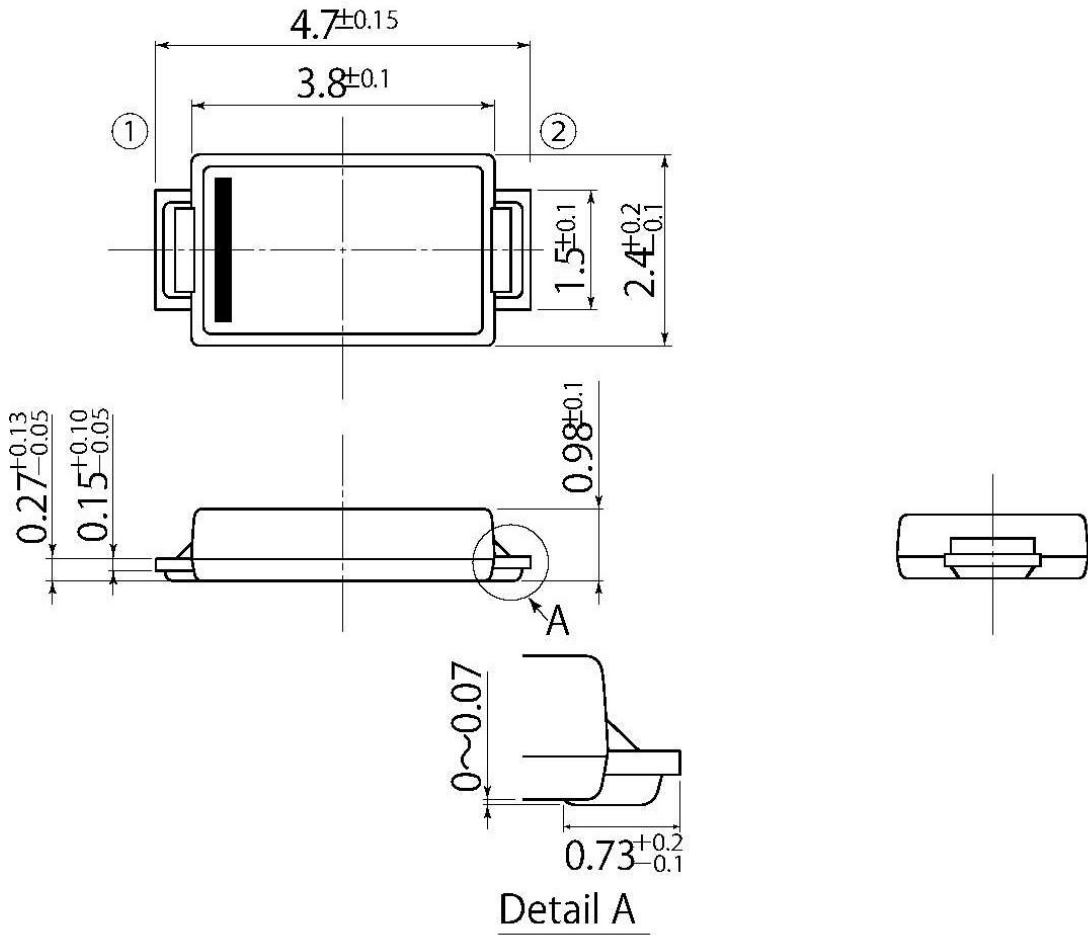


Transient Thermal Impedance



B5

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



Referential Soldering Pad

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