

D6FEC10ST

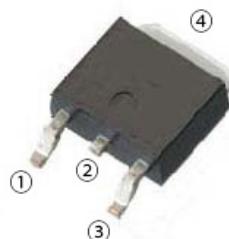
Schottky Barrier Diodes
100V, 6A

Feature

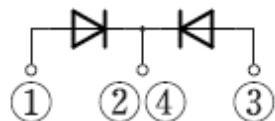
- SMD
- $T_j=175^\circ\text{C}$
- Ultra low I_R
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): FE
 Package (JEDEC Code): TO-252AB similar
 Package (JEITA Code): SC-63



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T_{stg}		-55 to 175	°C
Junction temperature	T_j		-55 to 175	°C
Repetitive peak reverse voltage	V_{RRM}		100	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Rating for each diode $I_F(AV)/2$, $T_c=154^\circ\text{C}$ \ddagger	6	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, $T_j=25^\circ\text{C}$	100	A
Surge forward current	I_{FSM1}	$t_p=1\text{ms}$, Sine wave, Non-repetitive, Peak value, $T_j=25^\circ\text{C}$	180	A

\ddagger : See the original Specifications

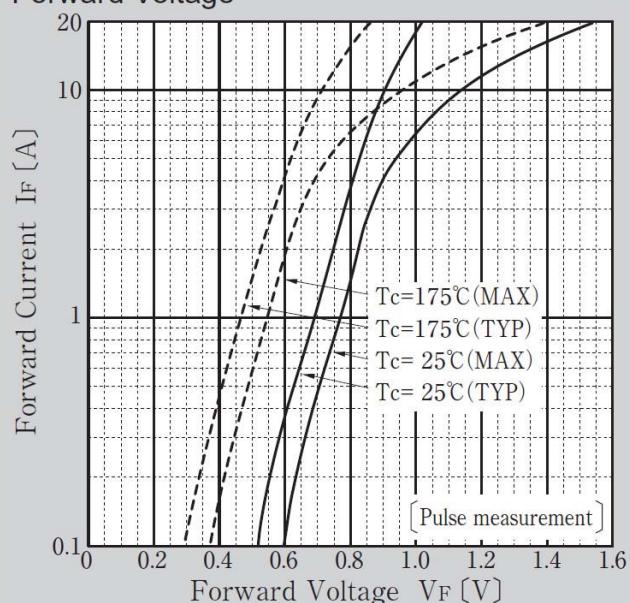
Electrical Characteristics (unless otherwise specified : $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$IF=3\text{A}$, Pulse measurement, per diode			0.86	V
Reverse current	I_R	$VR=100\text{V}$, Pulse measurement, per diode			0.008	mA
Total capacitance	C_t	$f=1\text{MHz}$, $VR=10\text{V}$, per diode		60		pF
Thermal resistance	$R_{th(j-c)}$	Junction to case, With heatsink \ddagger			4	$^\circ\text{C/W}$

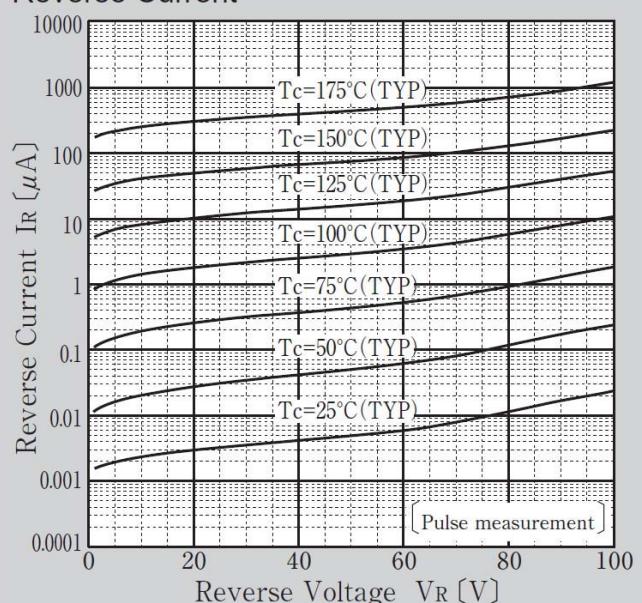
\ddagger :See the original Specifications

CHARACTERISTIC DIAGRAMS

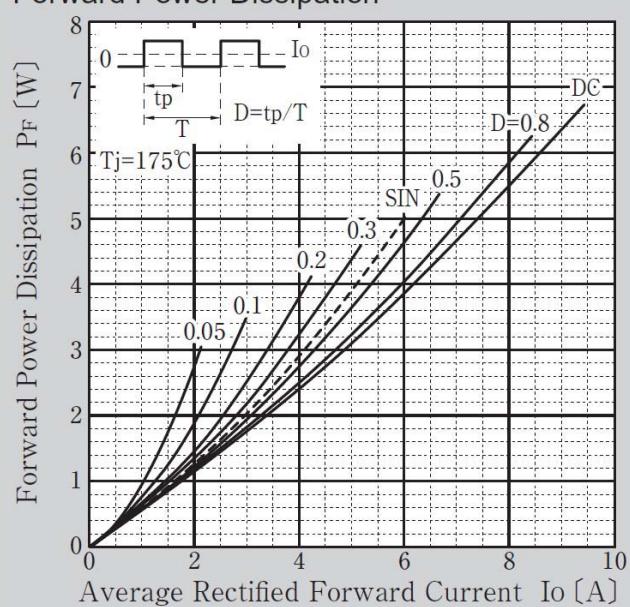
Forward Voltage



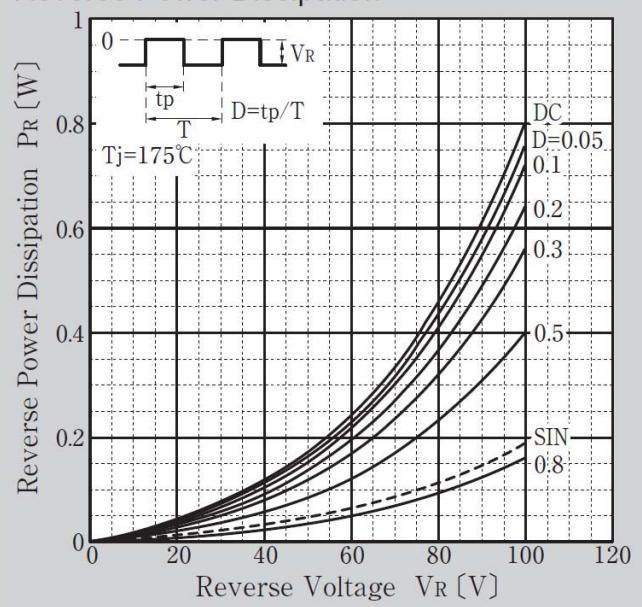
Reverse Current

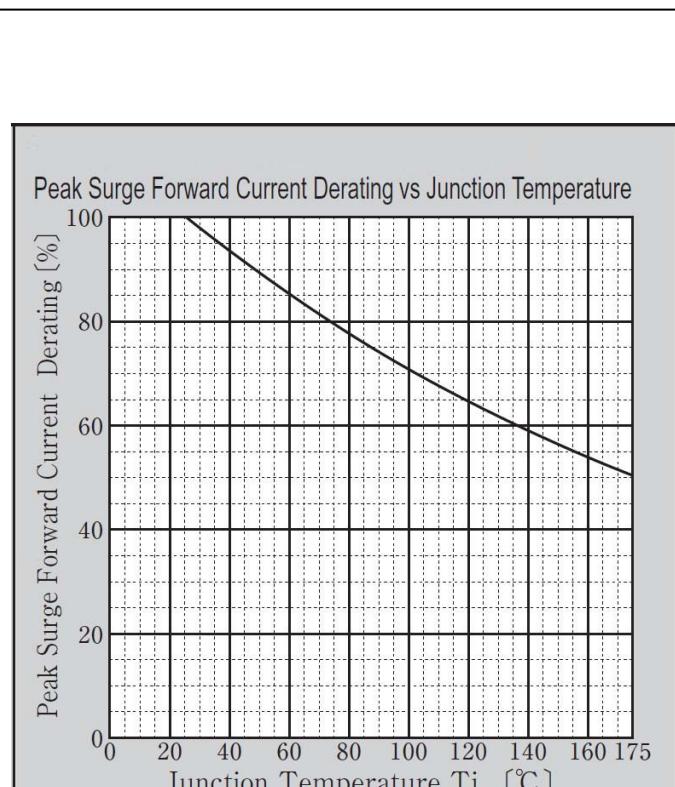
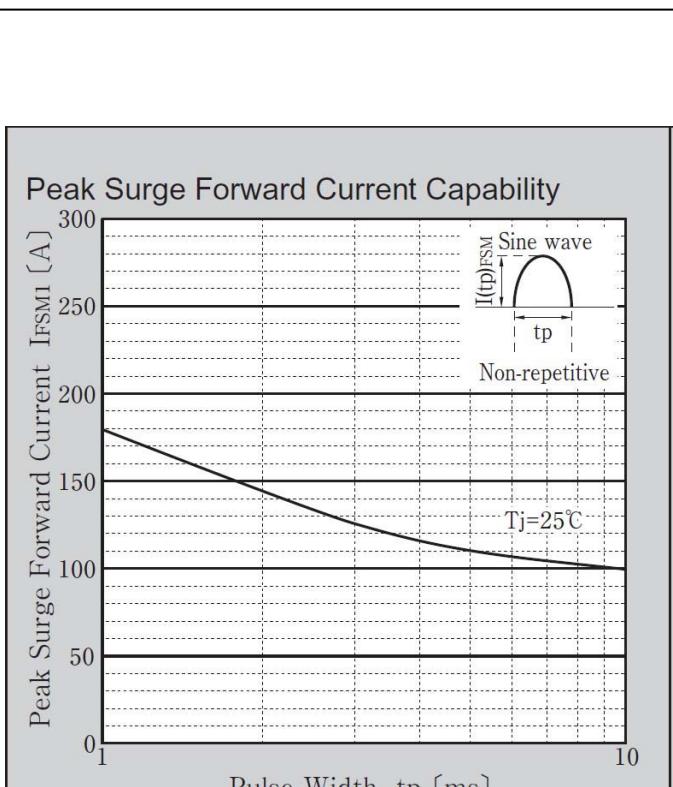
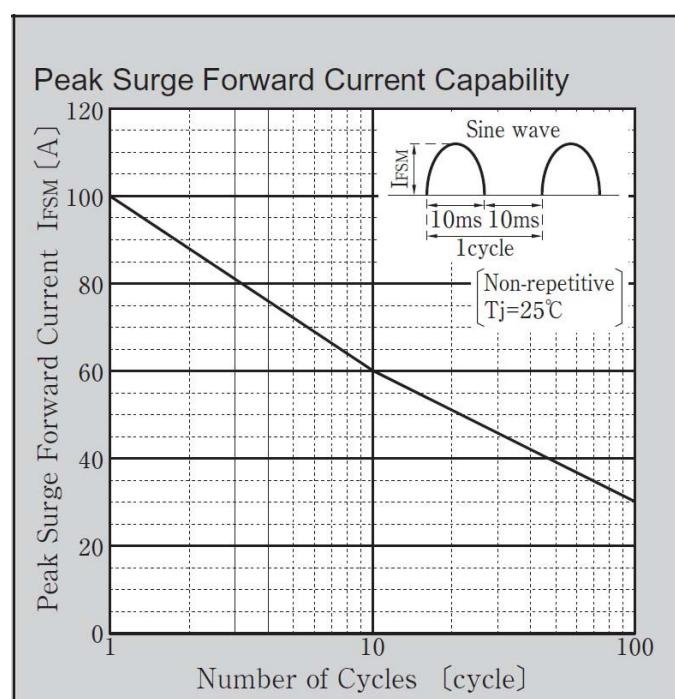
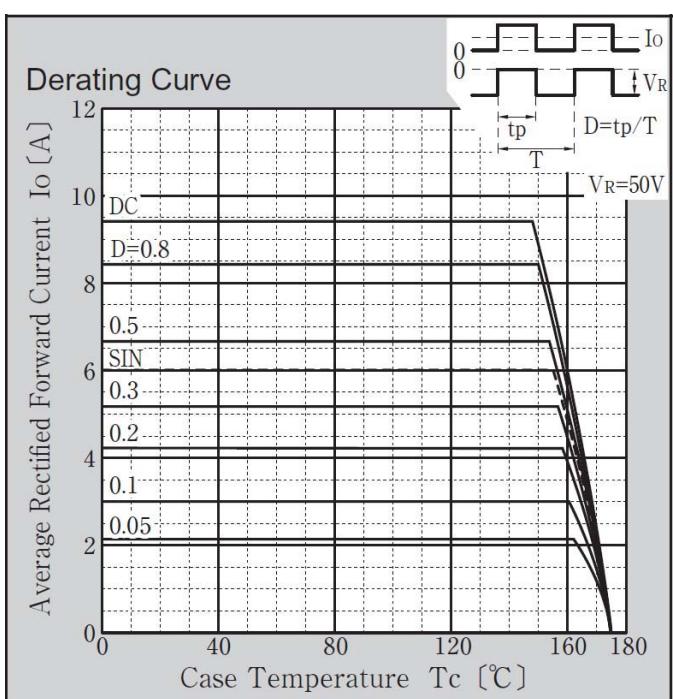


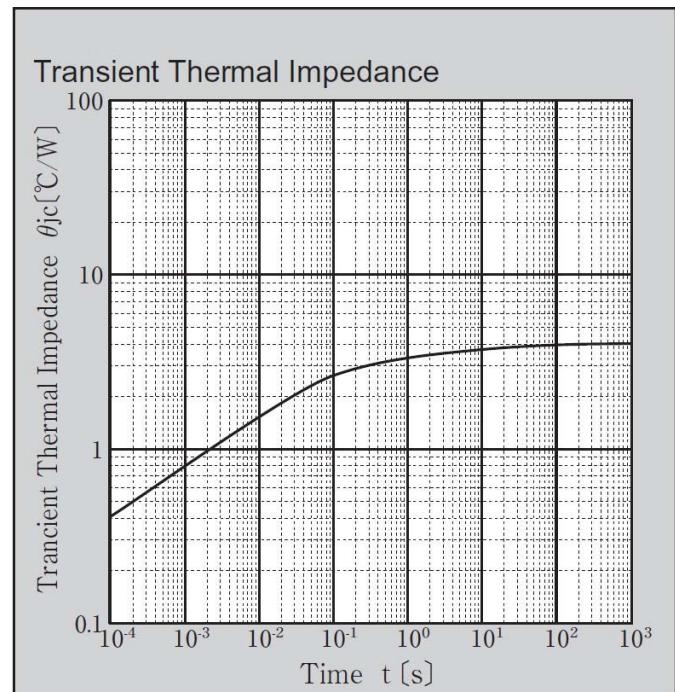
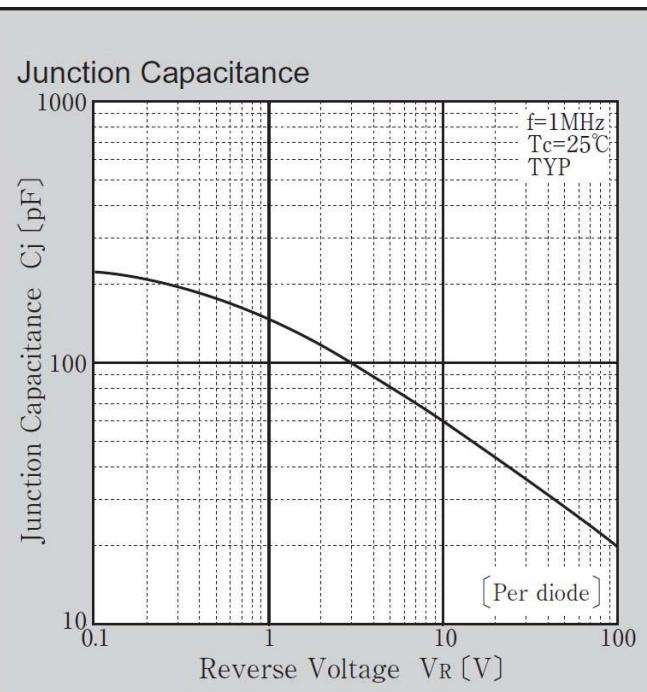
Forward Power Dissipation



Reverse Power Dissipation







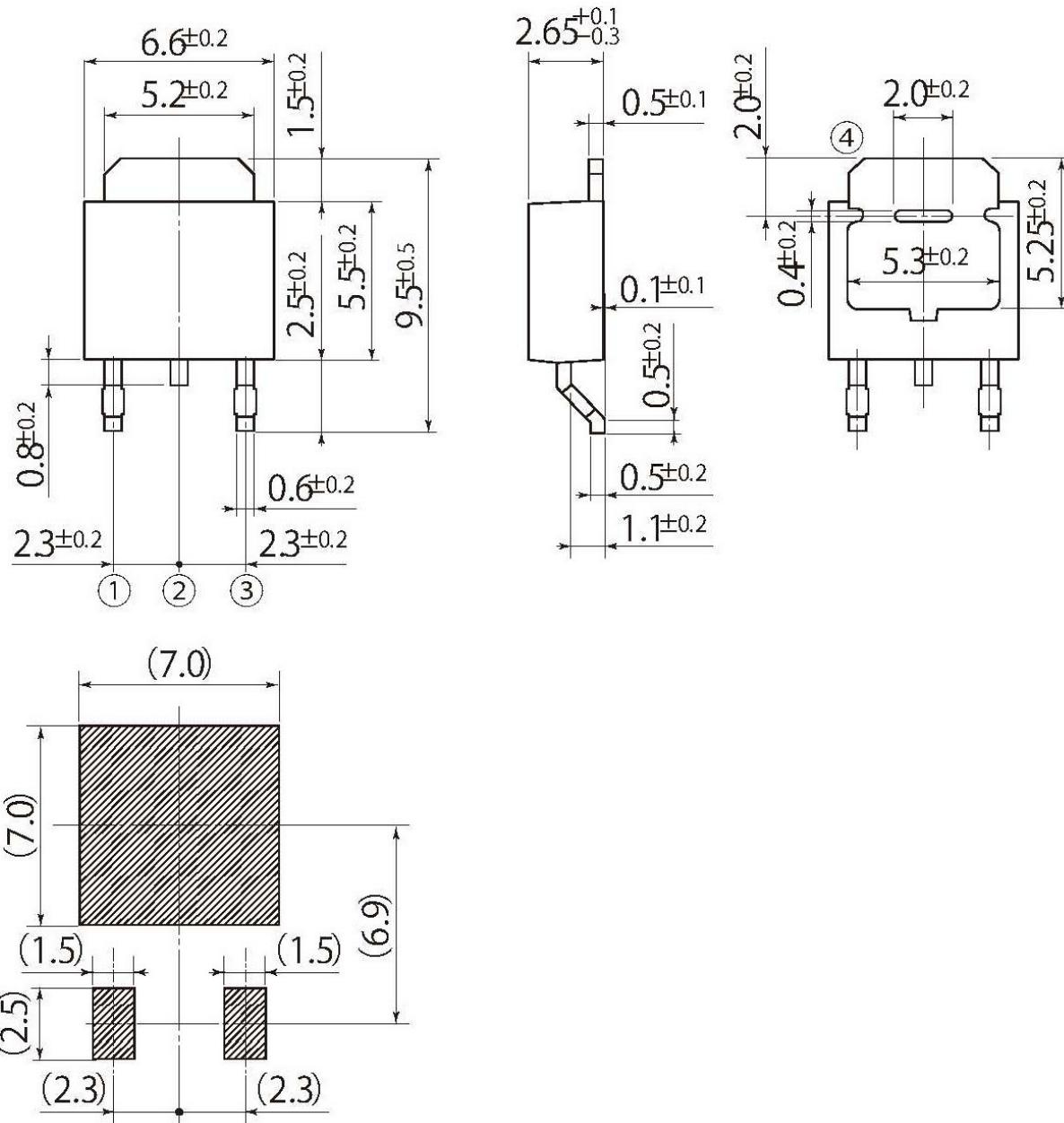
Outline Dimensions

unit:mm

scale: 4/1

G3

JEDEC Code	TO-252AB similar
JEITA Code	SC-63
House Name	FE



Referential Soldering Pad

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

Notes

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【Specific applications】

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