

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

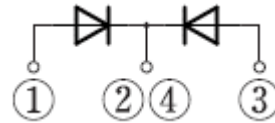
Package (House Name): FE

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	$^{\circ}\text{C}$
Junction temperature	T_j		-55 to 175	$^{\circ}\text{C}$
Repetitive peak reverse voltage	V_{RRM}		100	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Rating for each diode $I_F(AV)/2$, $T_c=154^{\circ}\text{C}$ ※	6	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1 cycle, 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

※ : See the original Specifications

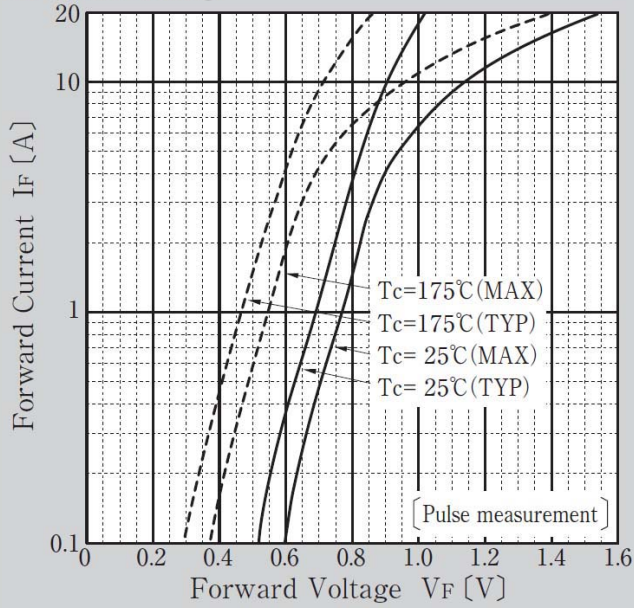
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =3A, Pulse measurement, per diode			0.86	V
Reverse current	I _R	V _R =100V, Pulse measurement, per diode			0.008	mA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		60		pF
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink ※			4	°C/W

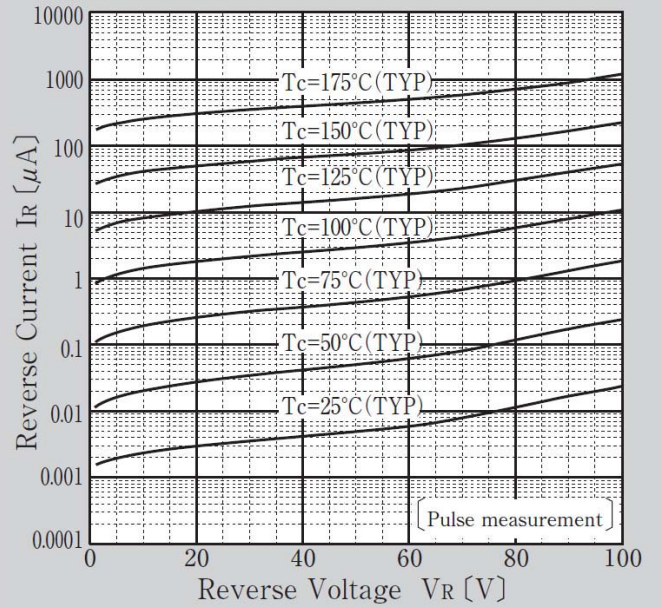
※ : See the original Specifications

CHARACTERISTIC DIAGRAMS

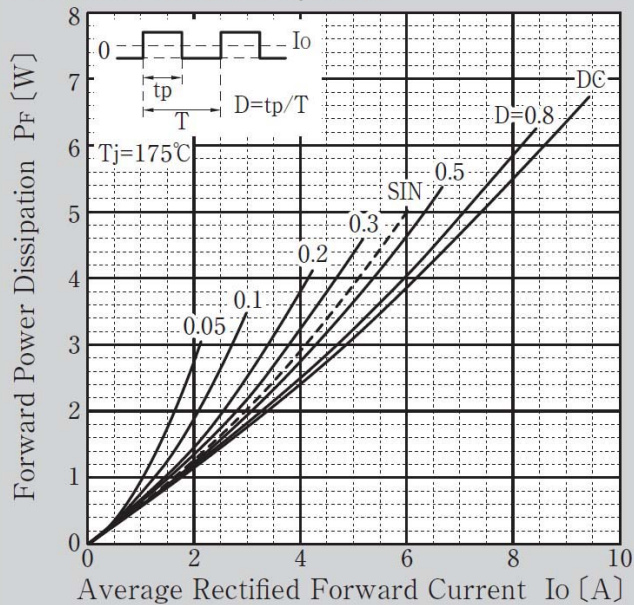
Forward Voltage



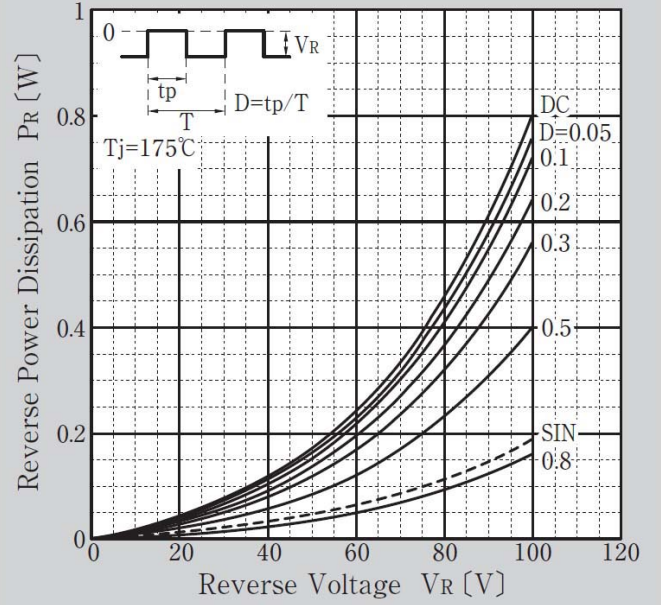
Reverse Current

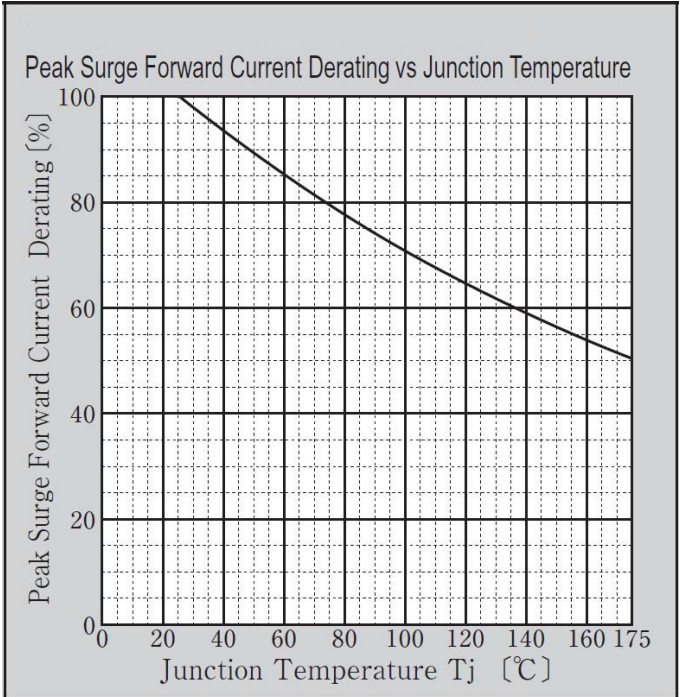
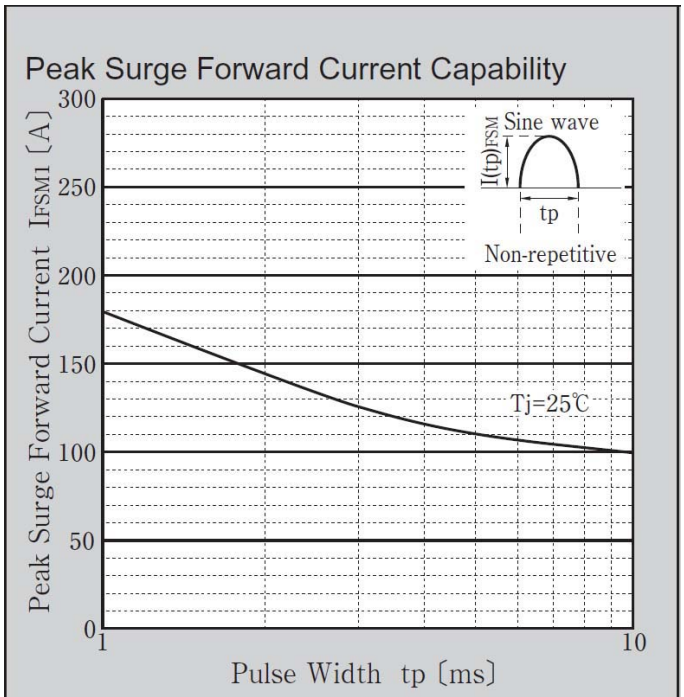
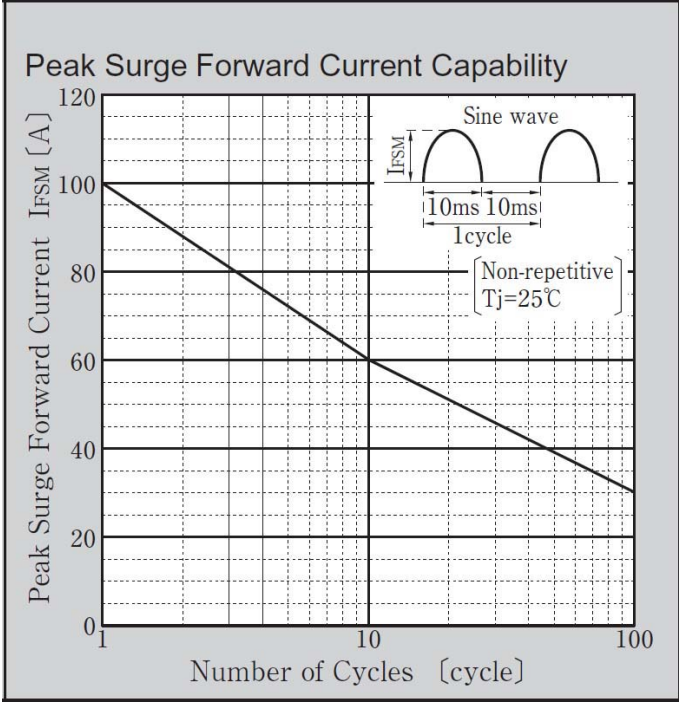
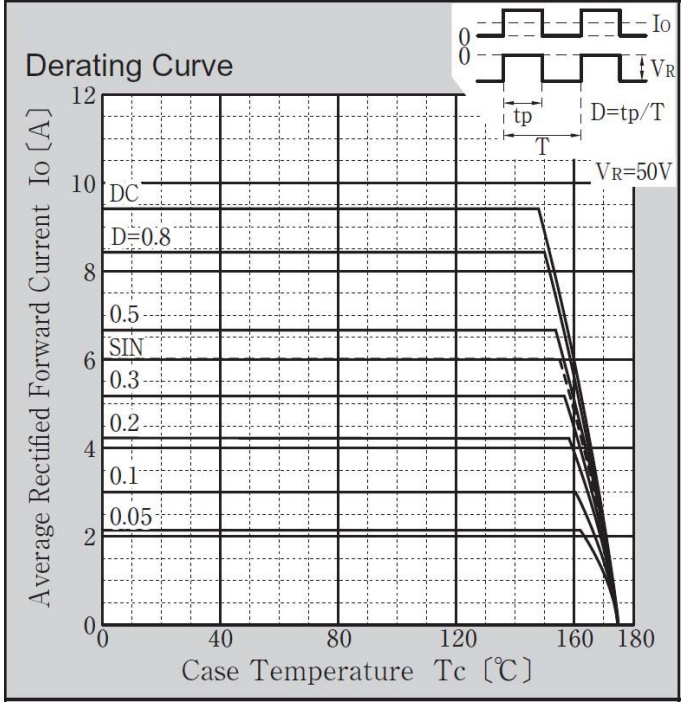


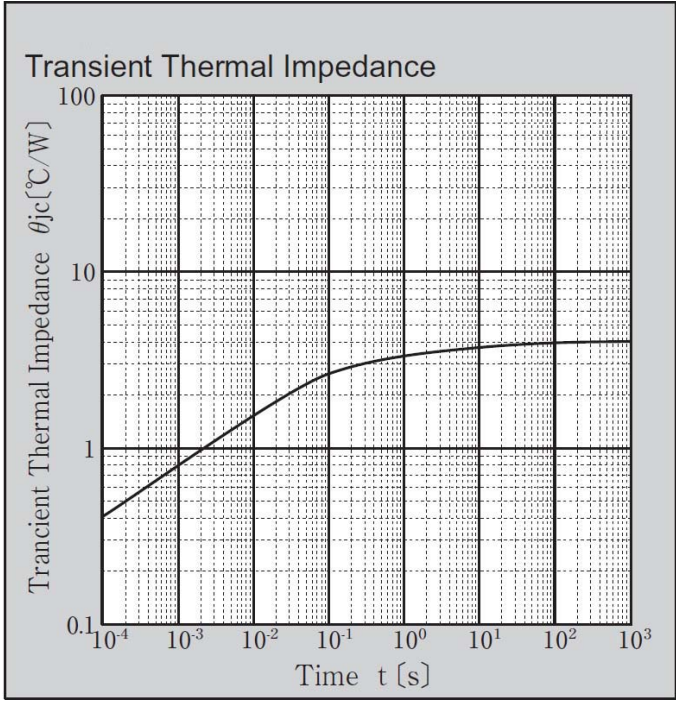
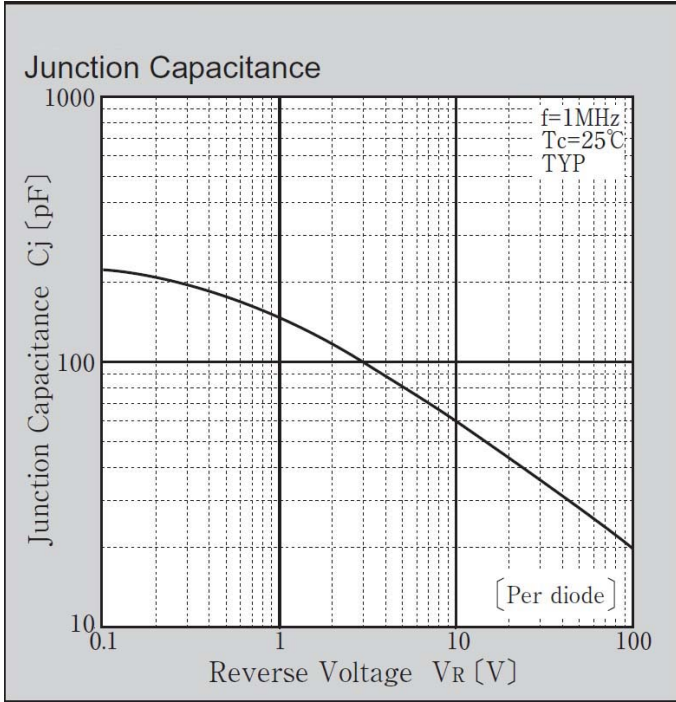
Forward Power Dissipation



Reverse Power Dissipation

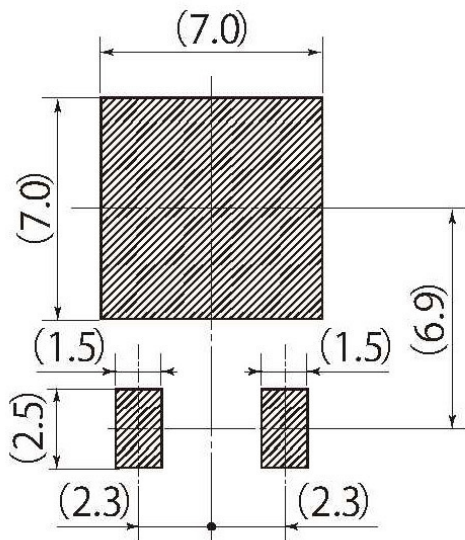
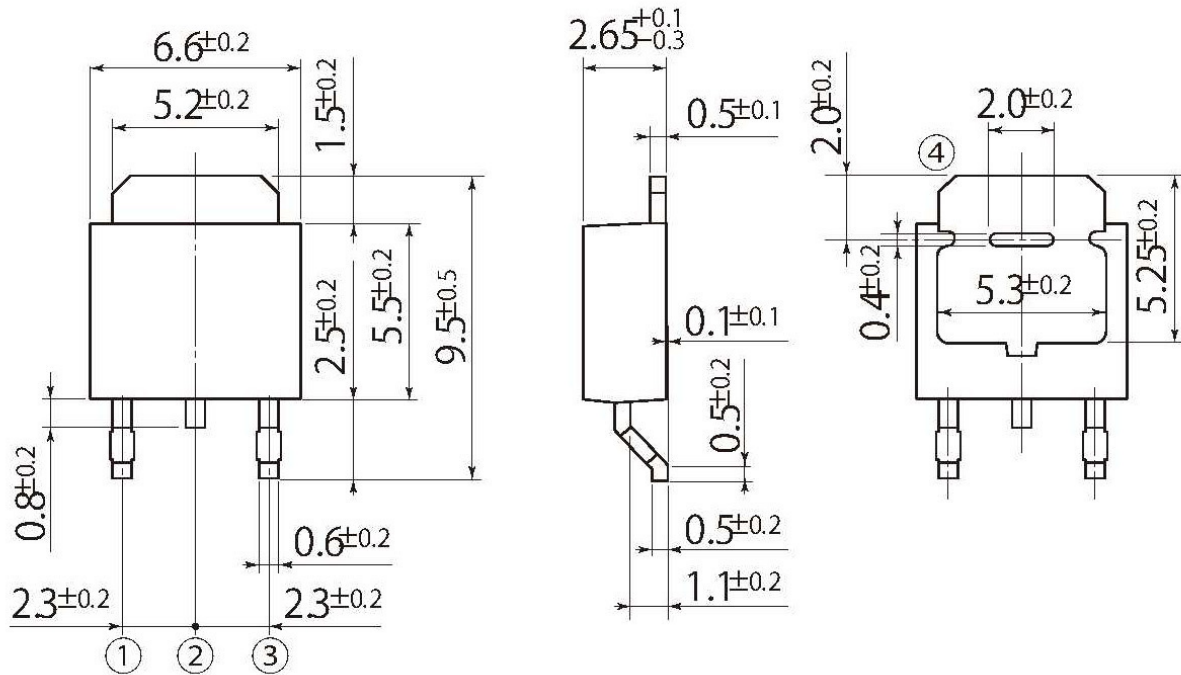






G3

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.