

# D6FEC12ST

Schottky Barrier Diodes  
120V, 6A

**Feature**

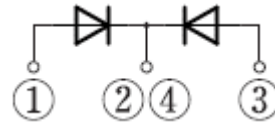
- SMD
- Tj=175°C
- Ultra low I<sub>R</sub>
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

**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<sub>c</sub>=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T <sub>stg</sub>		-55 to 175	°C
Junction temperature	T <sub>j</sub>		175	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		120	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Rating for each diode I <sub>F(AV)</sub> /2, T <sub>c</sub> =154°C	6	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, T <sub>j</sub> =25°C	100	A
Surge forward current	I <sub>FSM1</sub>	t <sub>p</sub> =1ms, T <sub>j</sub> =25°C, Non-repetitive	180	A

※ :See the original Specifications

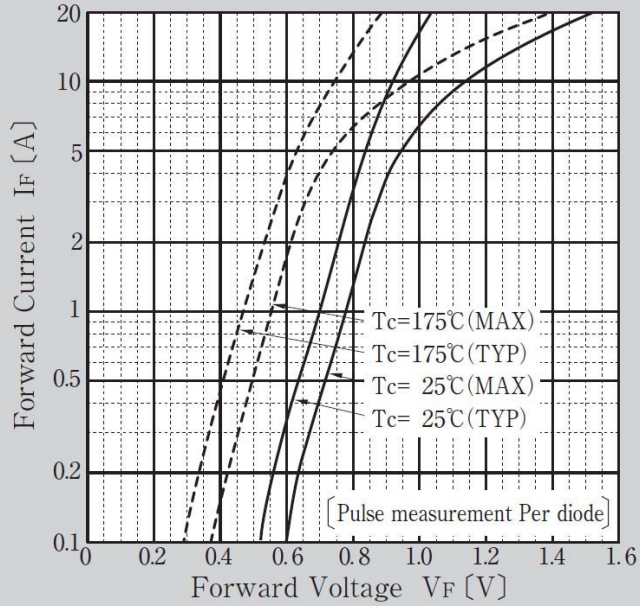
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =3A, Pulse measurement, per diode			0.87	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =120V, Pulse measurement, per diode			0.008	mA
Total capacitance	C <sub>t</sub>	f=1MHz, V <sub>R</sub> =10V, per diode		60		pF
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case			4	°C/W

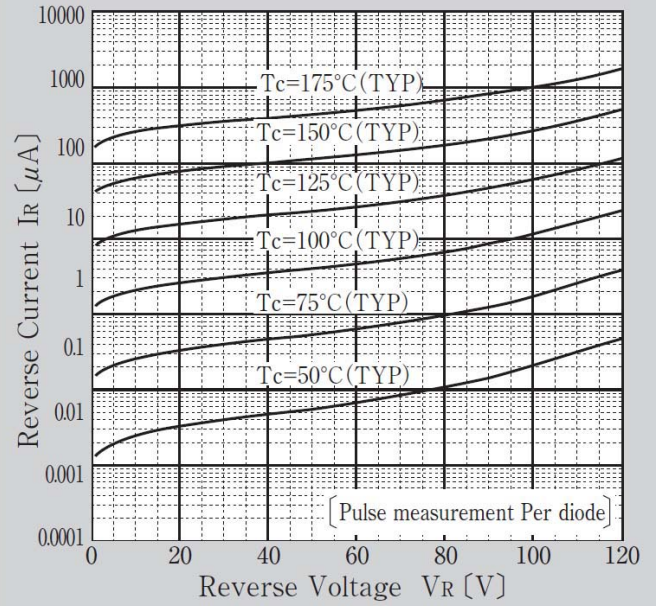
\* : See the original Specifications

# CHARACTERISTIC DIAGRAMS

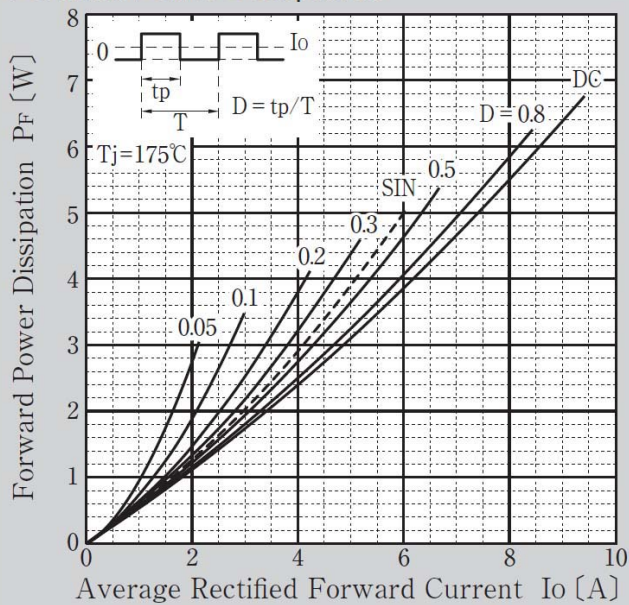
### Forward Voltage



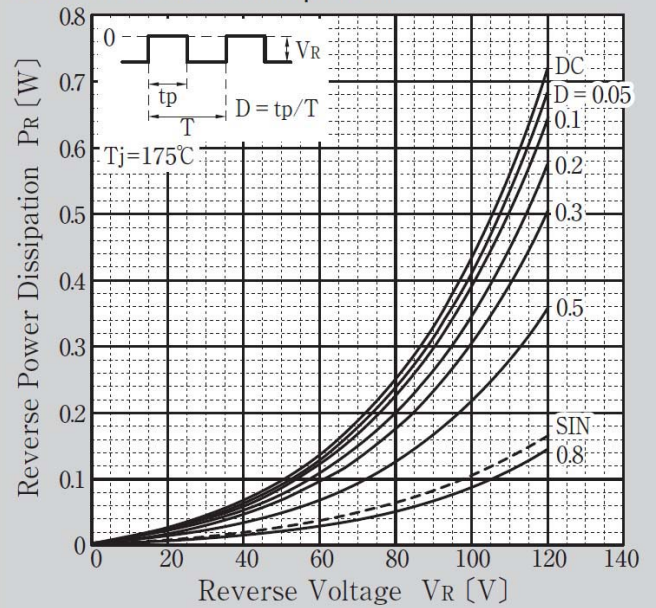
### Reverse Current

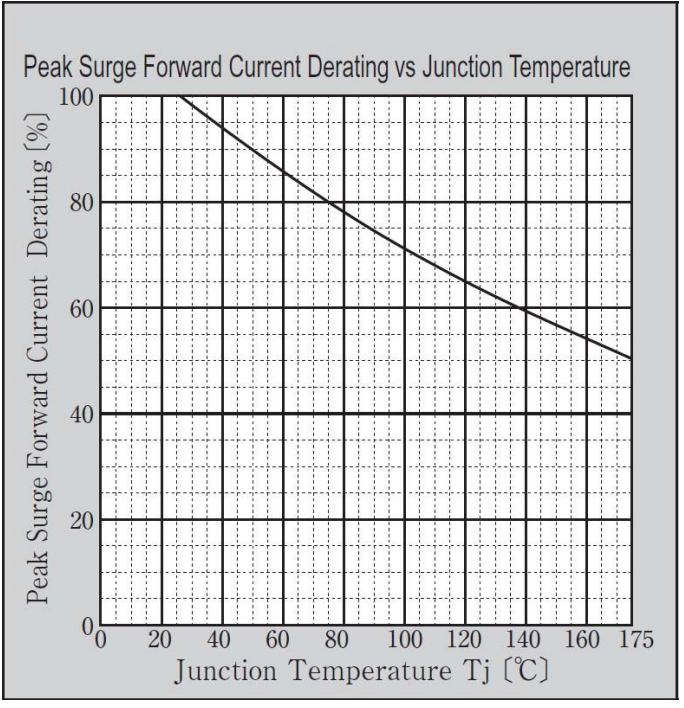
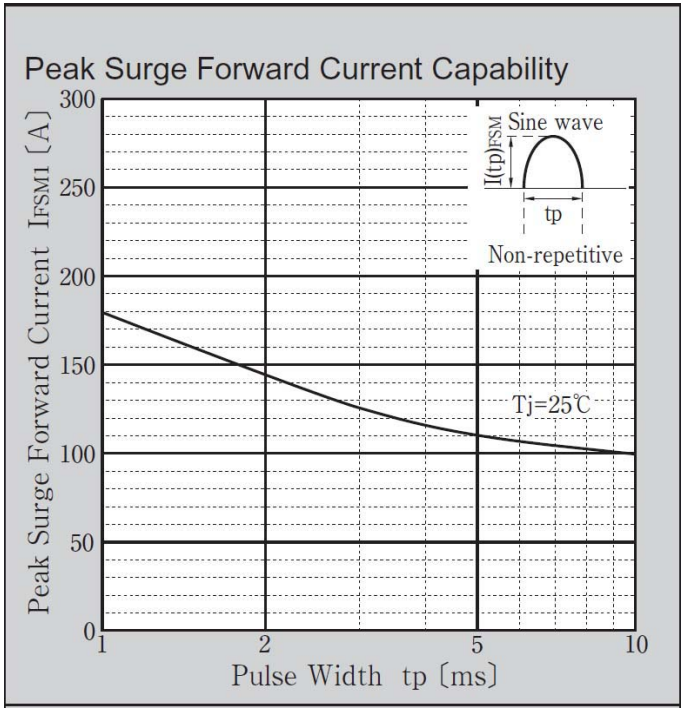
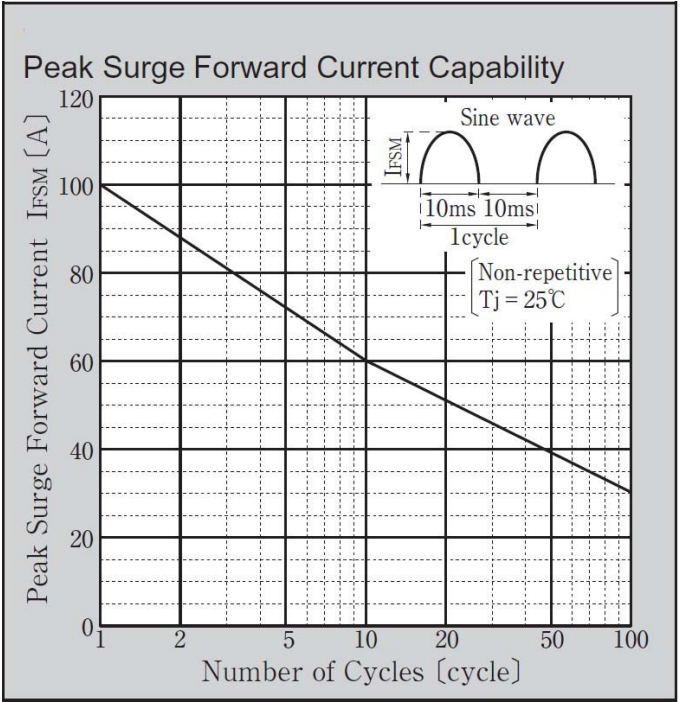
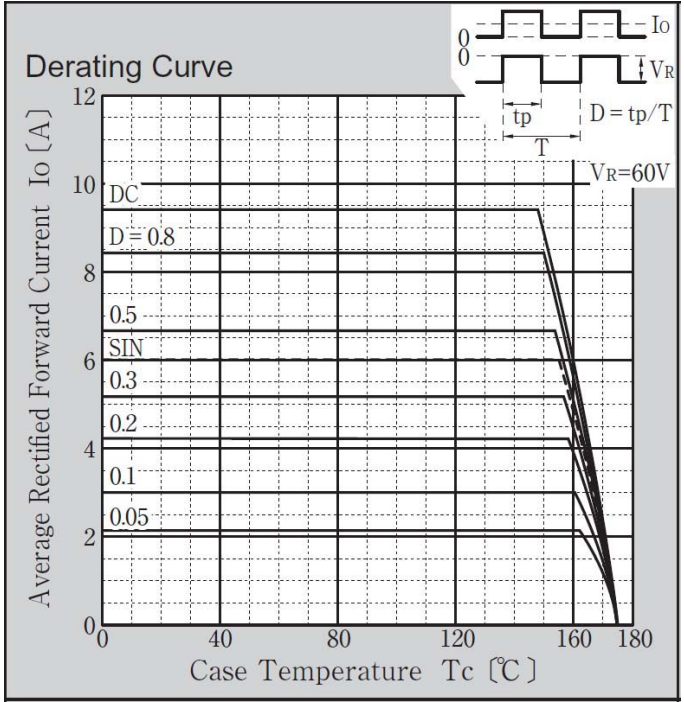


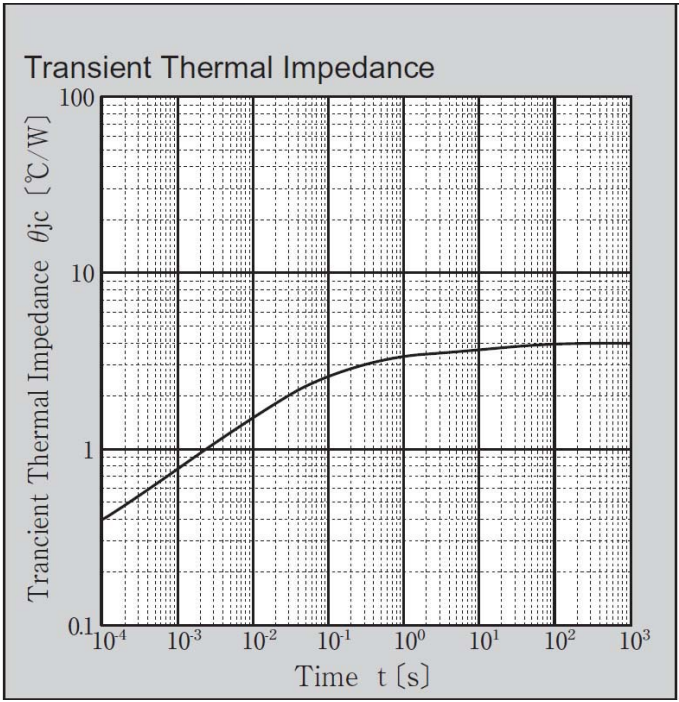
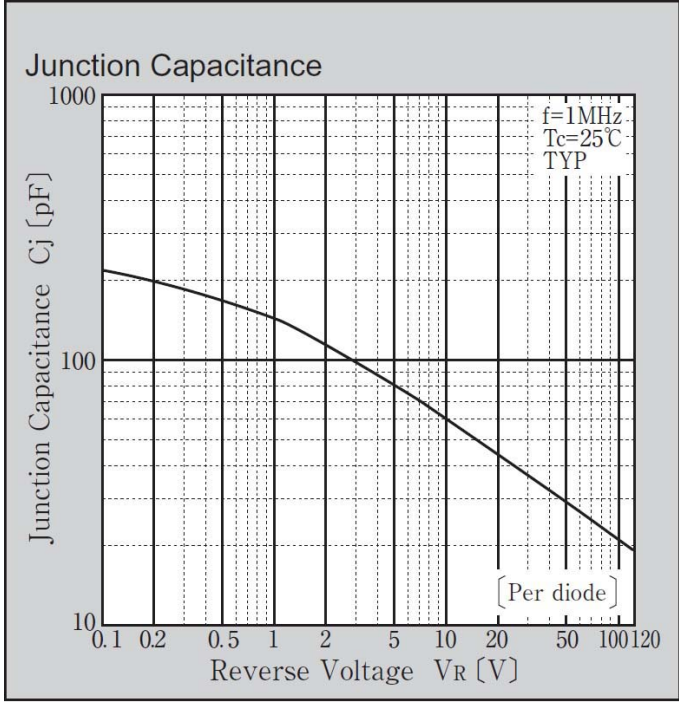
### Forward Power Dissipation



### Reverse Power Dissipation

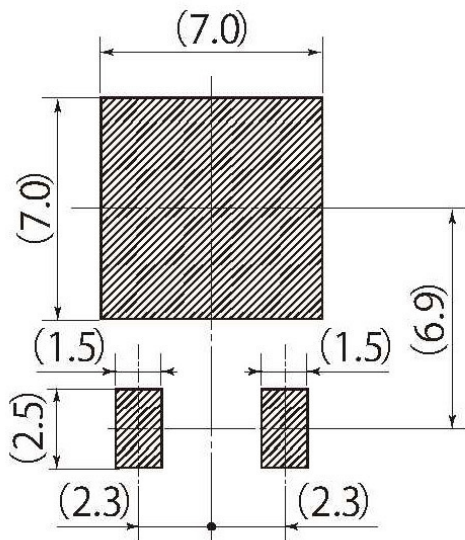
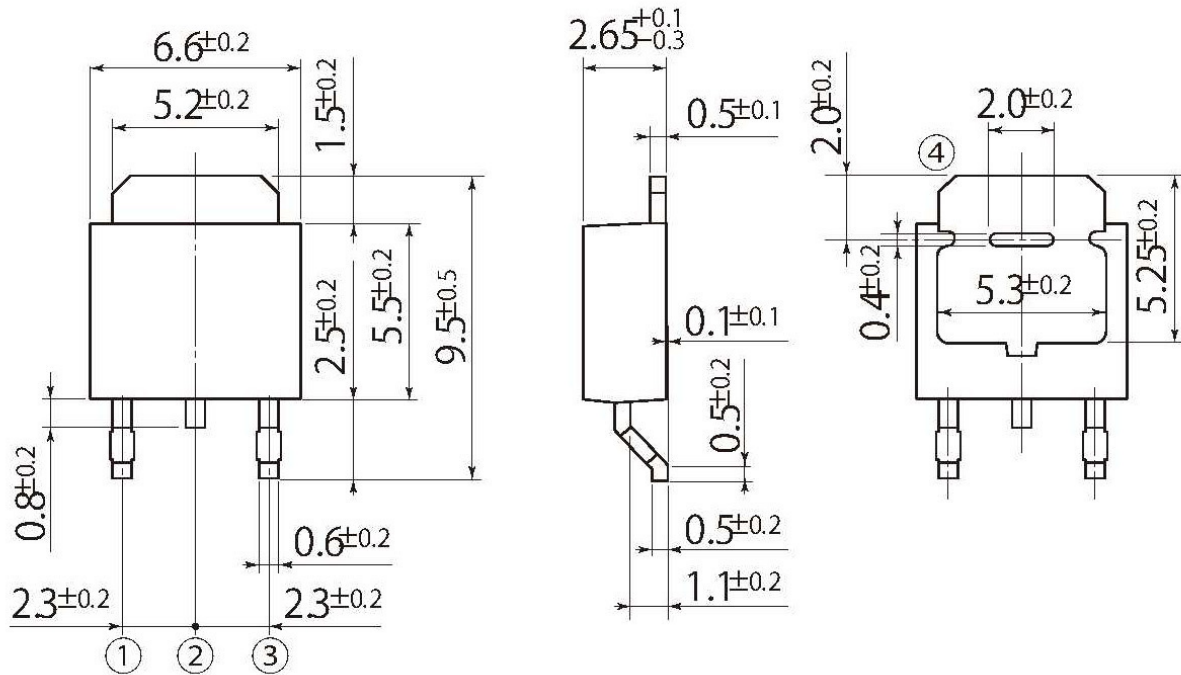






G3

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.