

D10FDC10ST

Schottky Barrier Diodes  
100V, 10A

Feature

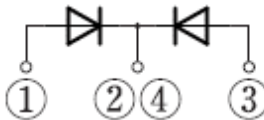
- SMD
- Tj=175°C
- Ultra low I<sub>R</sub>
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): FD  
Package (JEITA Code): SC-83 similar



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperrature	Tstg		-55 to 175	°C
Junction temperature	Tj		175	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		100	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, Tc=158°C	10	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	150	A

※ :See the original Specifications

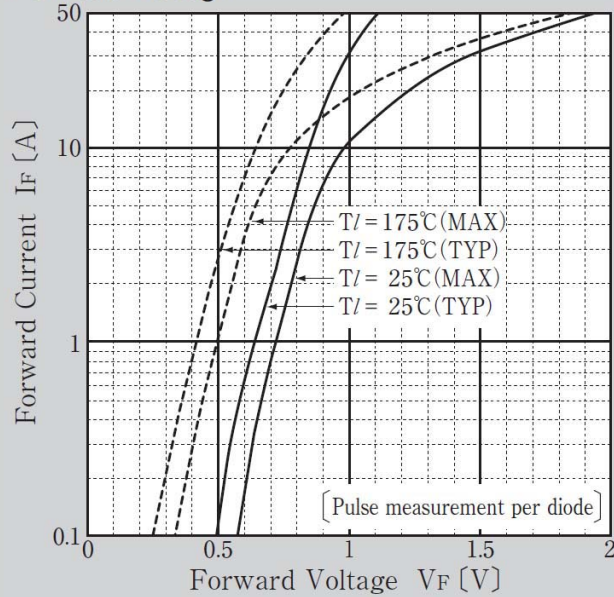
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	IF=5A, Pulse measurement, per diode			0.86	V
Reverse current	I <sub>R</sub>	VR=100V, Pulse measurement, per diode			0.015	mA
Total capacitance	Ct	f=1MHz, VR=10V, per diode		104		pF
Thermal resistance	Rth(j-c)	Junction to case			2	°C/W

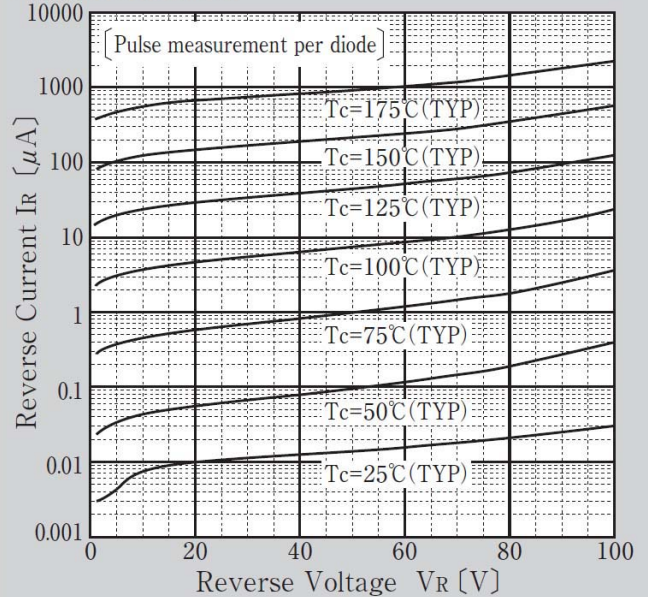
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS

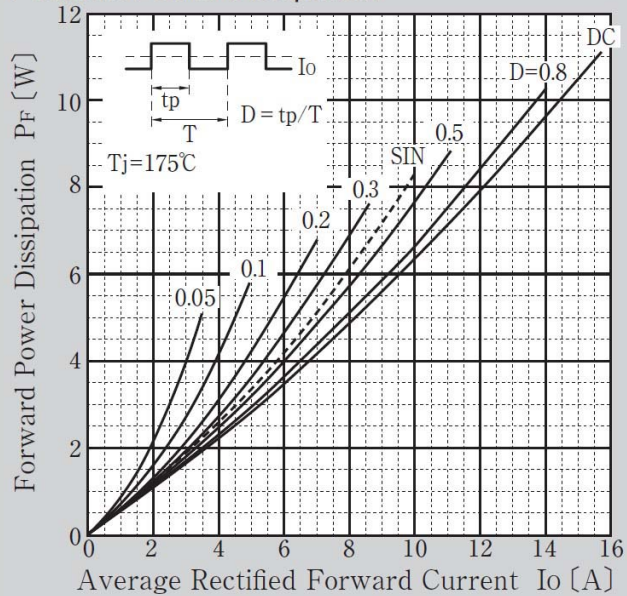
Forward Voltage



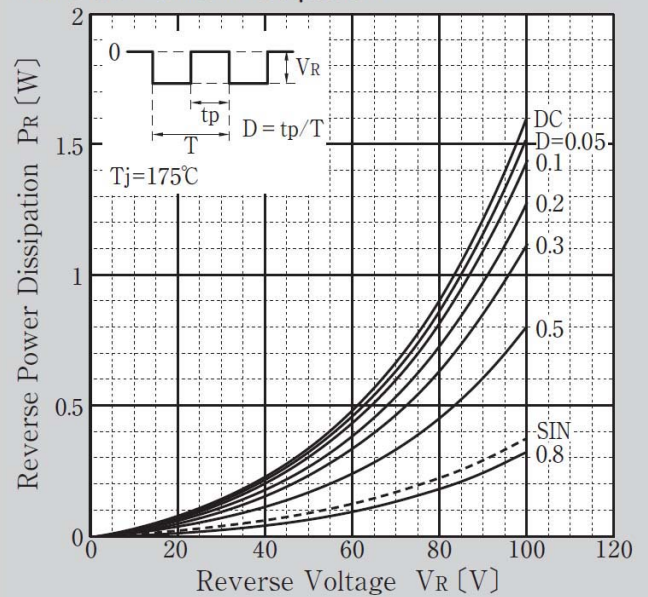
Reverse Current



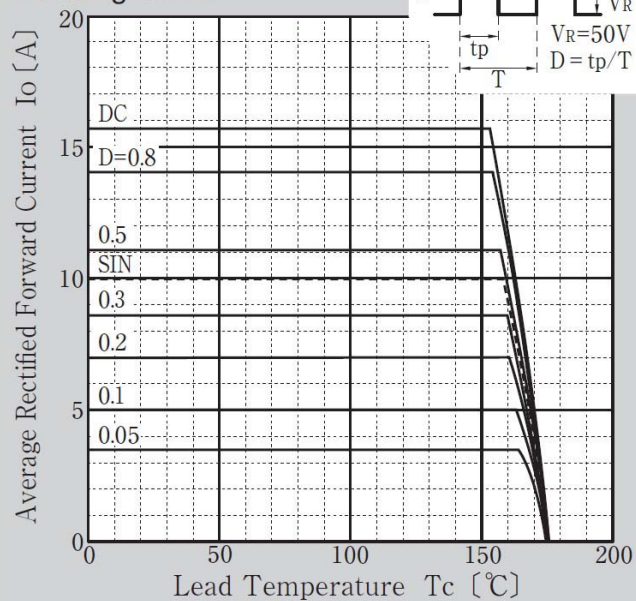
Forward Power Dissipation



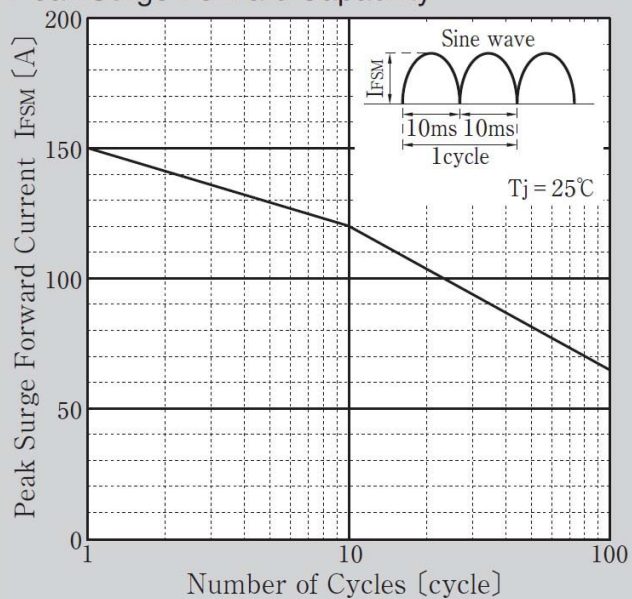
Reverse Power Dissipation



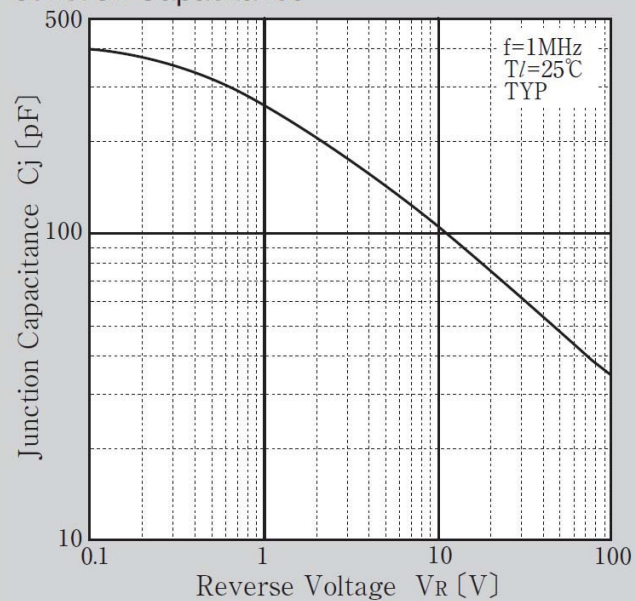
### Derating Curve



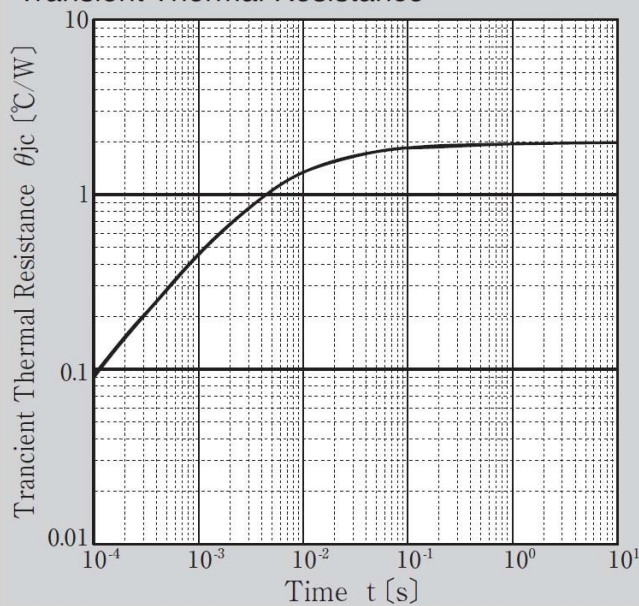
### Peak Surge Forward Capability



### Junction Capacitance

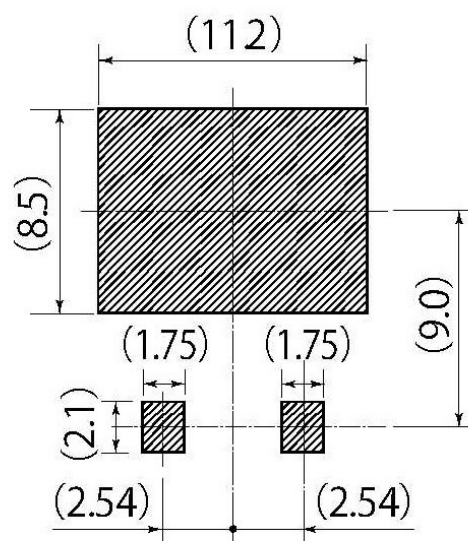
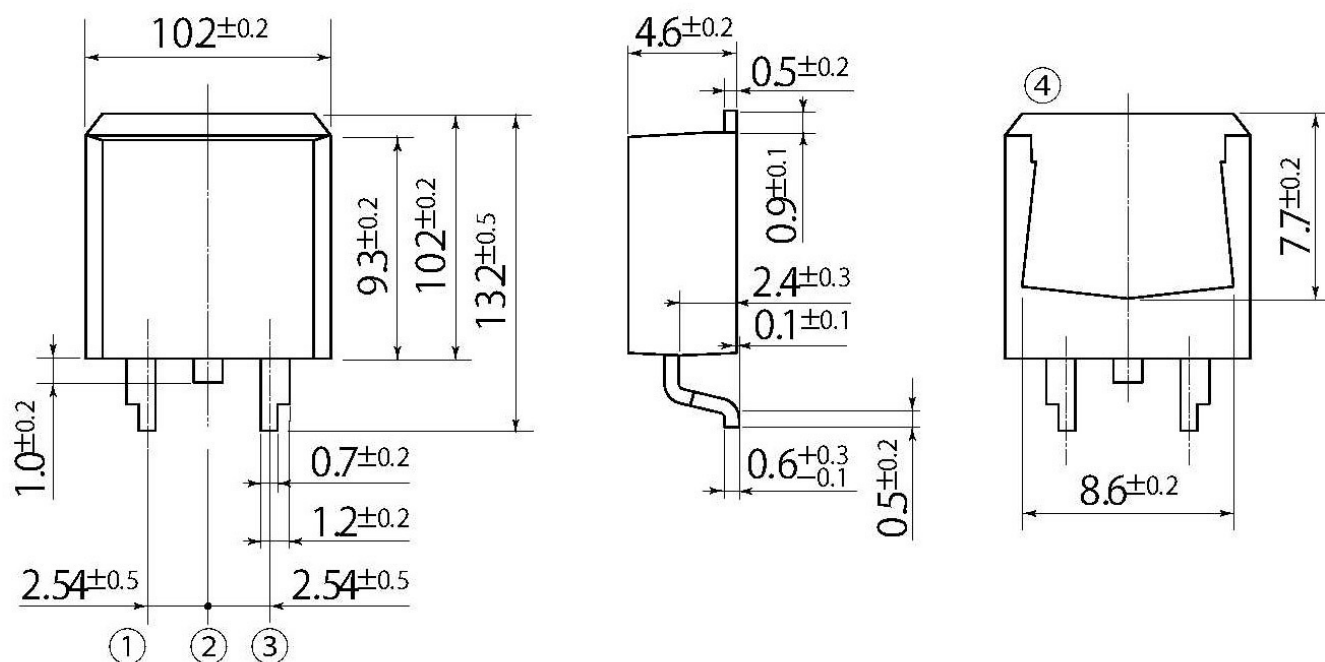


### Transient Thermal Resistance



H2

JEDEC Code	—
JEITA Code	SC-83 similar
House Name	FD



Referential Soldering Pad

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

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