ShinDengen

D10FDC10ST

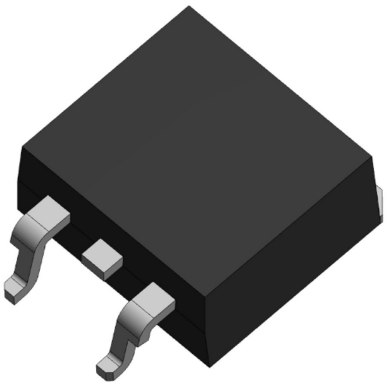
Schottky Barrier Diodes
100V, 10A

Feature

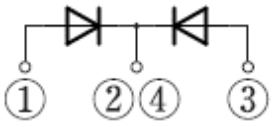
- SMD
- Tj=175°C
- Ultra low I_R
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

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_{RRM}		100	V
Average forward current	I_F(AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, Tc=158°C	10	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	150	A

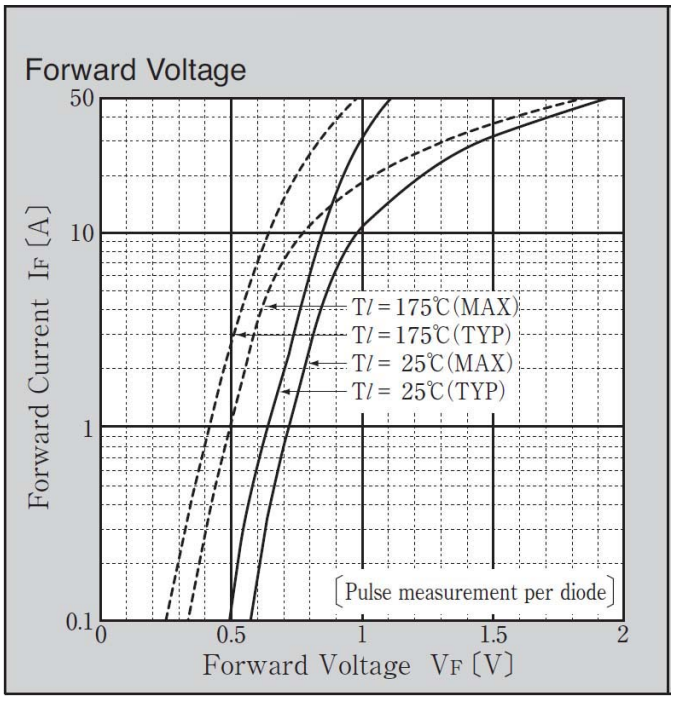
※ :See the original Specifications

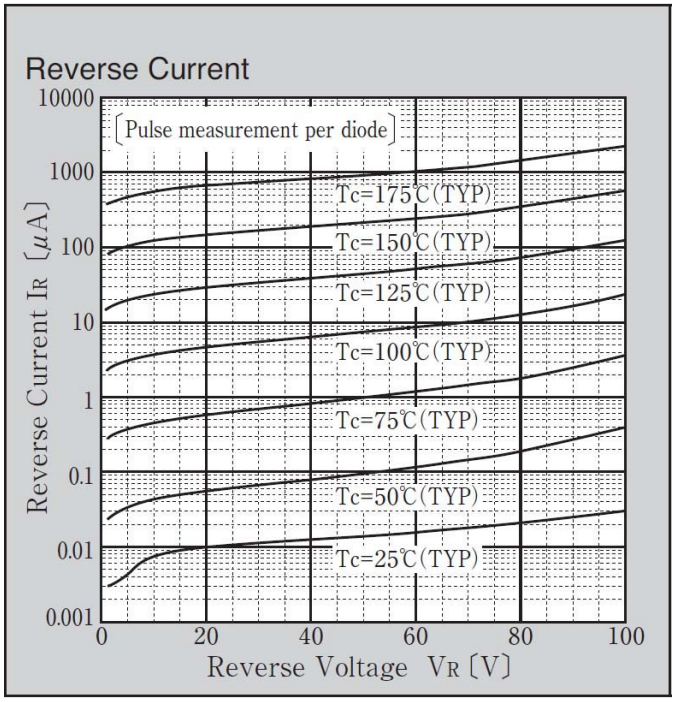
Electrical Characteristics (unless otherwise specified : Tc=25°C)

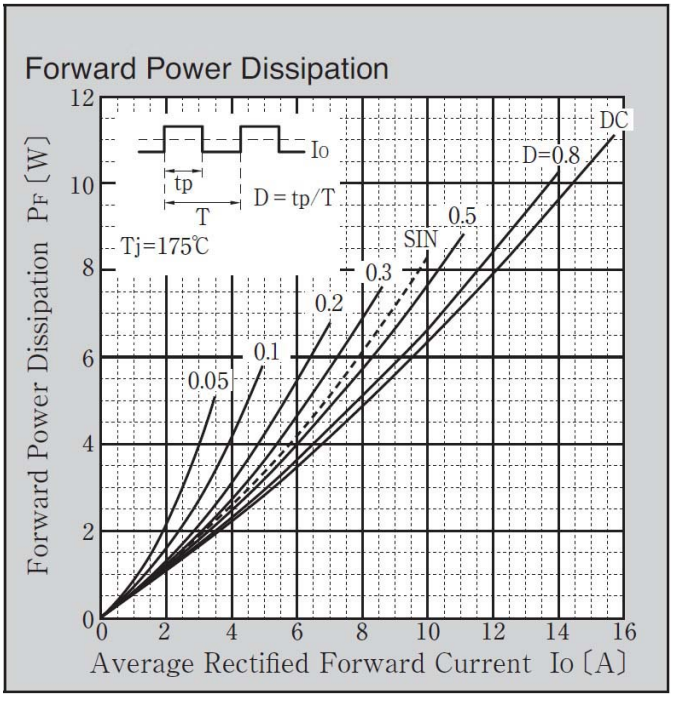
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=5A, Pulse measurement, per diode			0.86	V
Reverse current	I_R	VR=100V, Pulse measurement, per diode			0.015	mA
Total capacitance	Ct	f=1MHz, VR=10V, per diode		104		pF
Thermal resistance	Rth(j-c)	Junction to case			2	°C/W

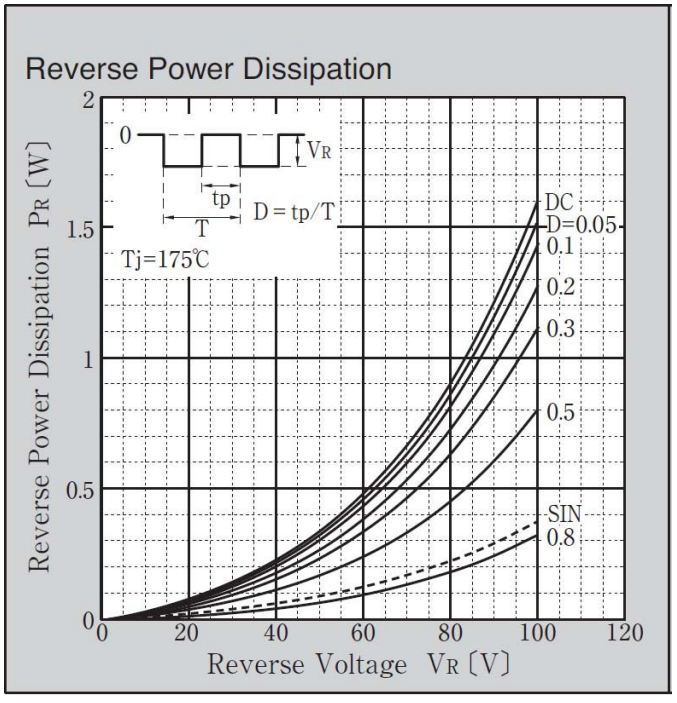
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

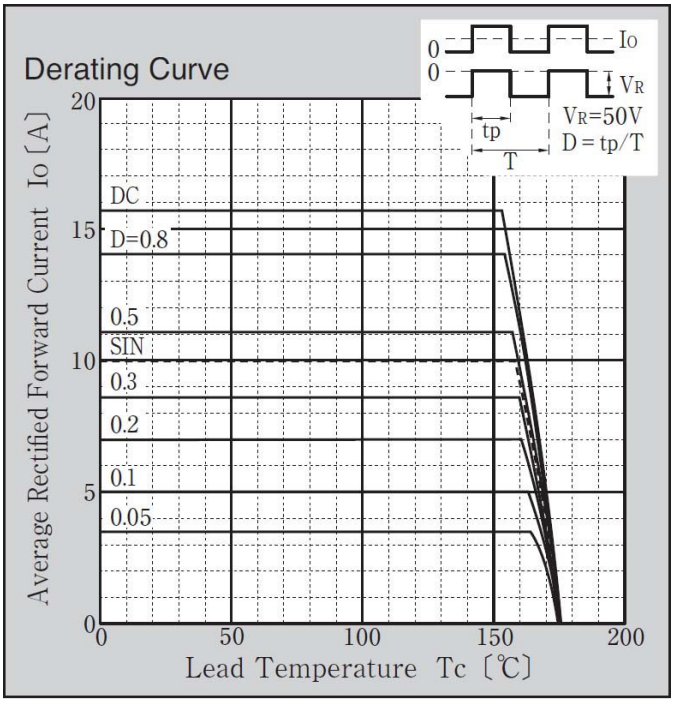




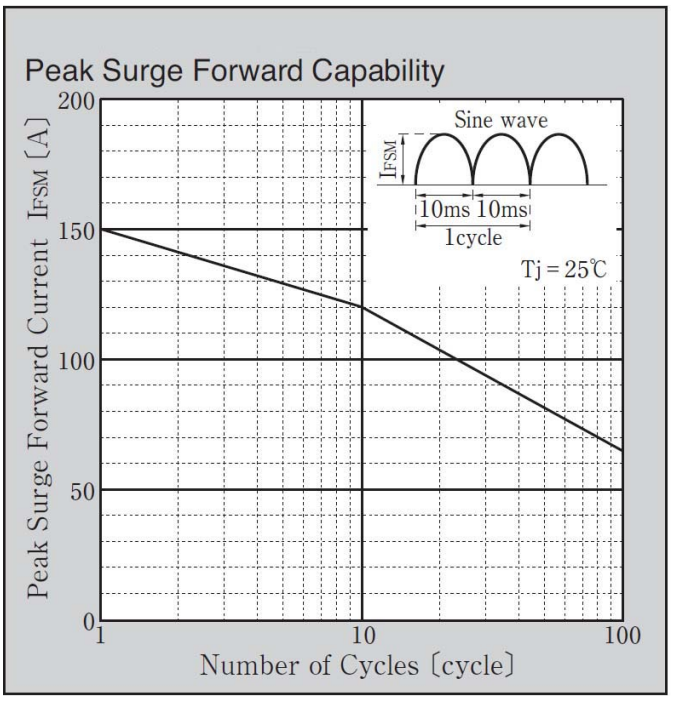




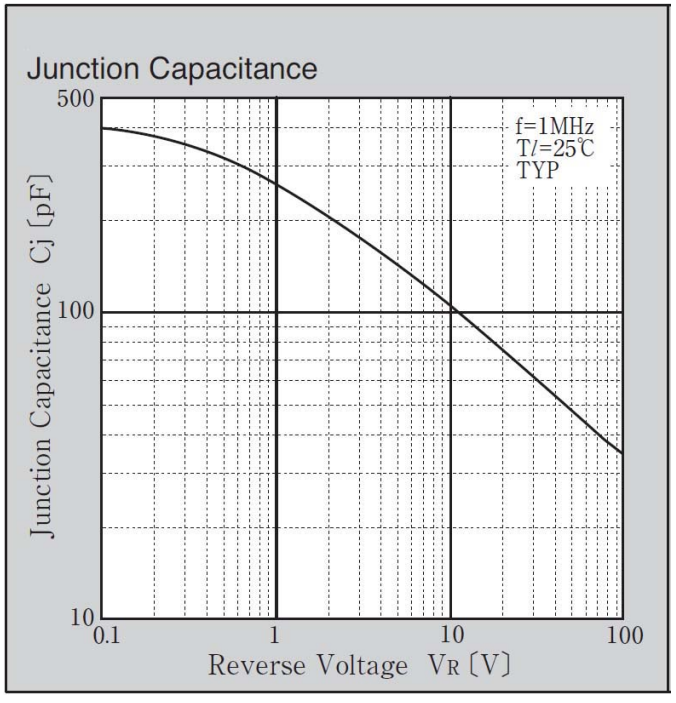
Derating Curve



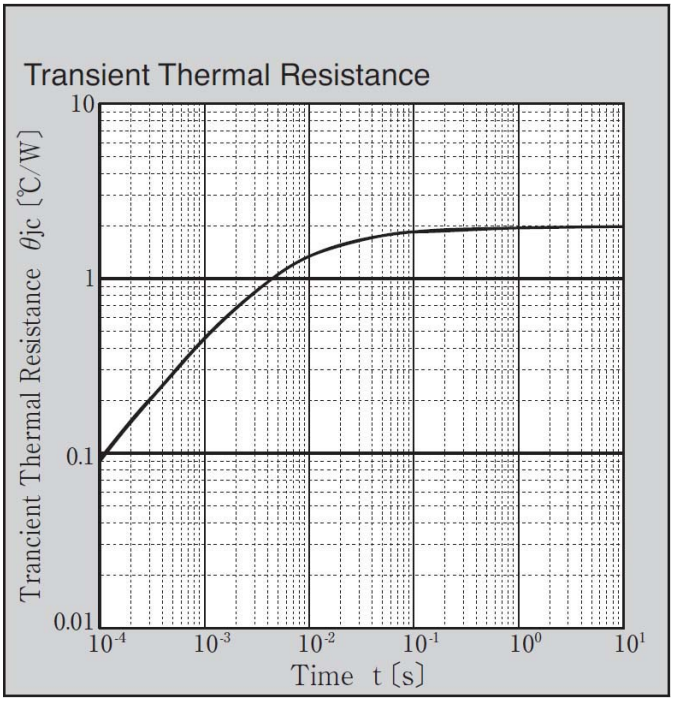
Peak Surge Forward Capability



Junction Capacitance



Transient Thermal Resistance

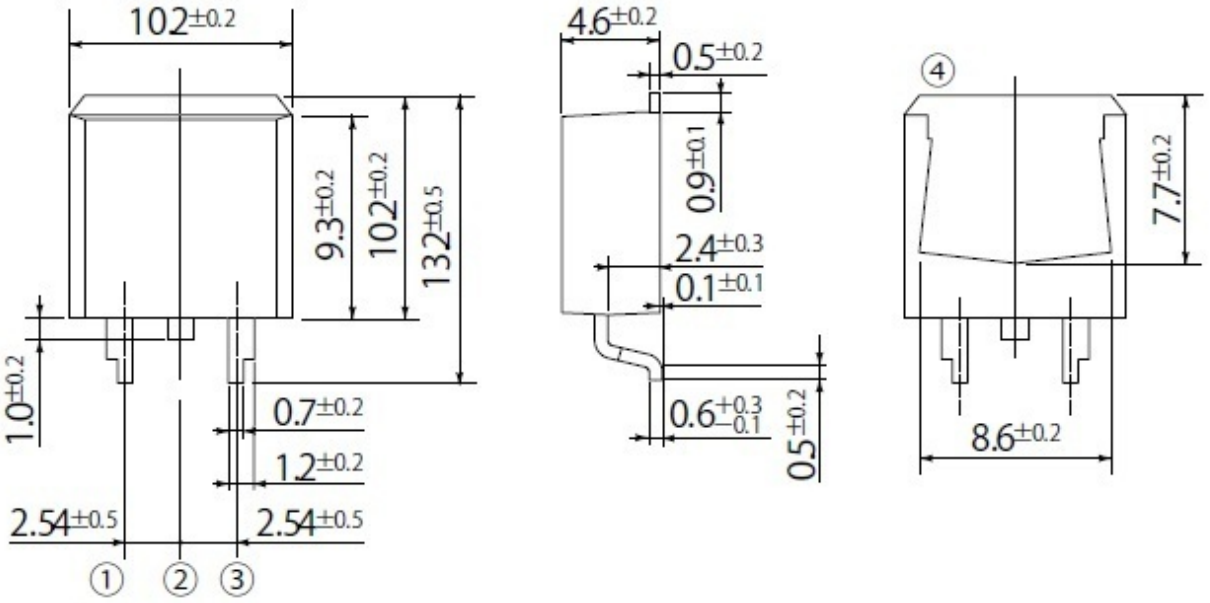


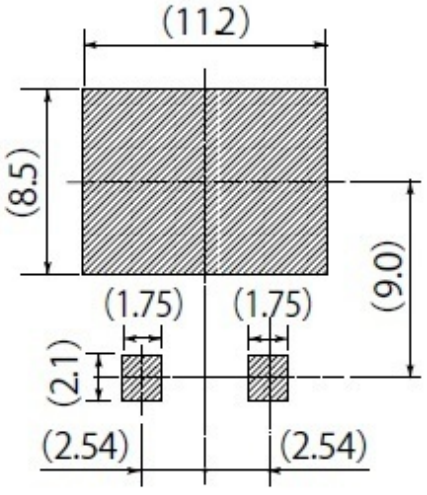
Outline Dimensions

unit:mm

H2

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

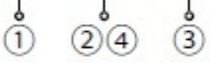




Referential Soldering Pad

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

Fig. H2-2



• The content specified herein is subject to change for improvement without notice.
• If you wish to use any such products, please be sure to refer to the specifications.

U182-1(2026.09)

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   【Standard applications】
   Computers, office automation and other office equipment, communication terminals, test and measurement equipment, audio/visual equipment, amusement equipment, consumer electronics, machine tools, personal electronic equipment, industrial equipment, etc.
   【Special applications】
   Transportation equipment (vehicles, ships, etc.), trunk-line communication equipment, traffic signal control systems, anti-disaster/crime systems, safety equipment, medical equipment, etc.
   【Specific applications】
   Nuclear reactor control systems, aircraft, aerospace equipment, submarine repeaters, life support equipment and systems, etc.
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