

# D10FDC10ST

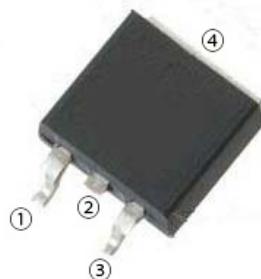
Schottky Barrier Diodes  
100V, 10A

## Feature

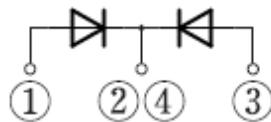
- SMD
- $T_j=175^\circ\text{C}$
- Ultra low  $I_R$
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

## OUTLINE

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



## 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	$T_j$		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 $I_F(AV)/2$ , $T_c=158^\circ\text{C}$	10	A
Surge forward current	$I_{FSM}$	50Hz sine wave, Non-repetitive, 1cycle, Peak value, $T_j=25^\circ\text{C}$	150	A

※ : See the original Specifications

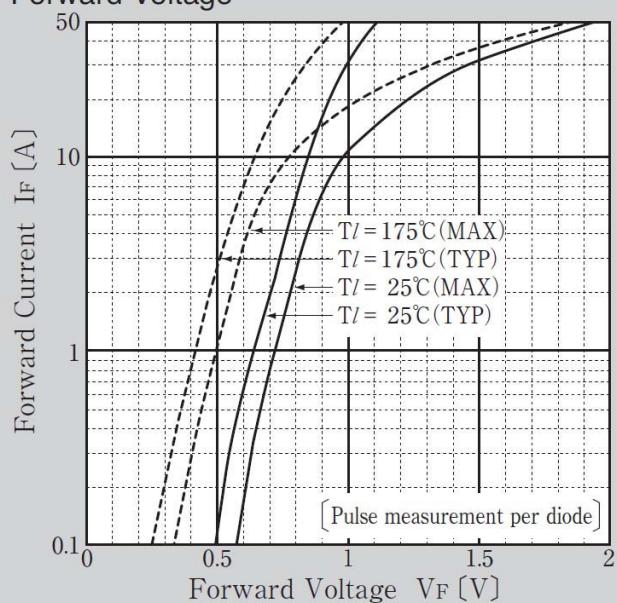
## Electrical Characteristics (unless otherwise specified : $T_c=25^\circ\text{C}$ )

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

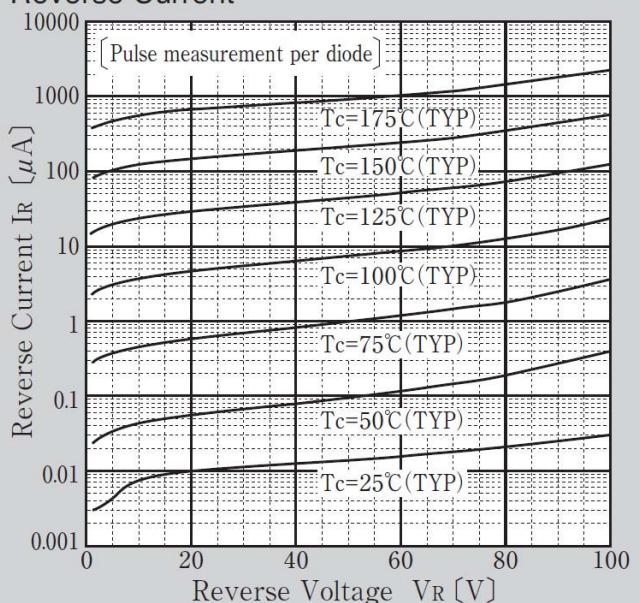
※ : See the original Specifications

## CHARACTERISTIC DIAGRAMS

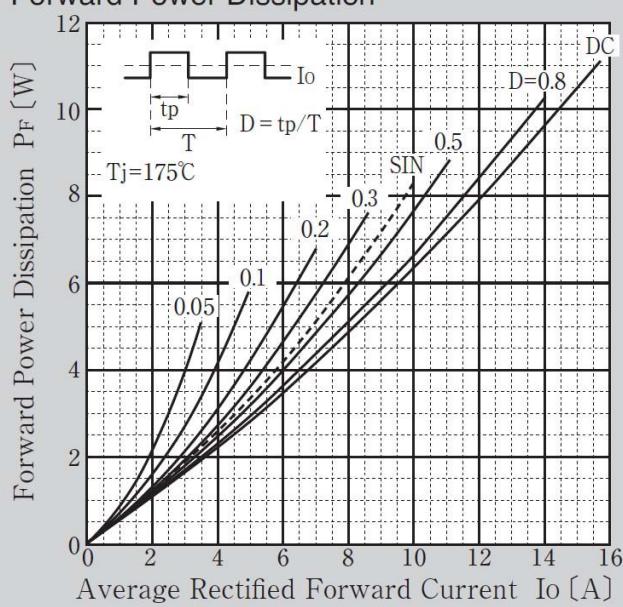
Forward Voltage



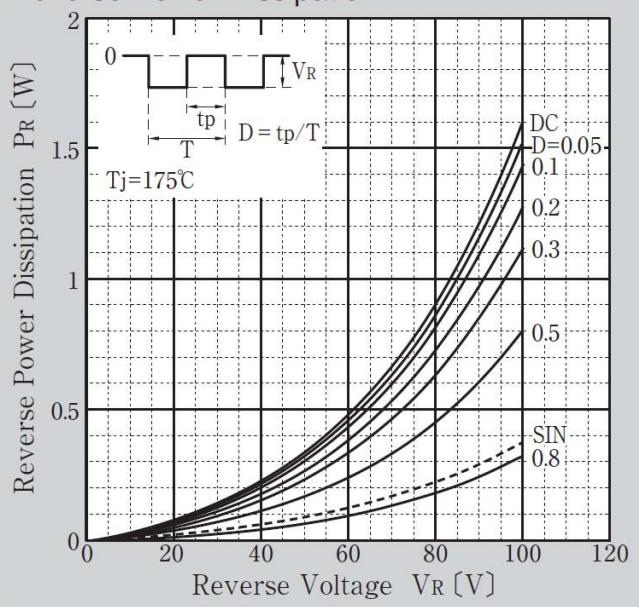
Reverse Current

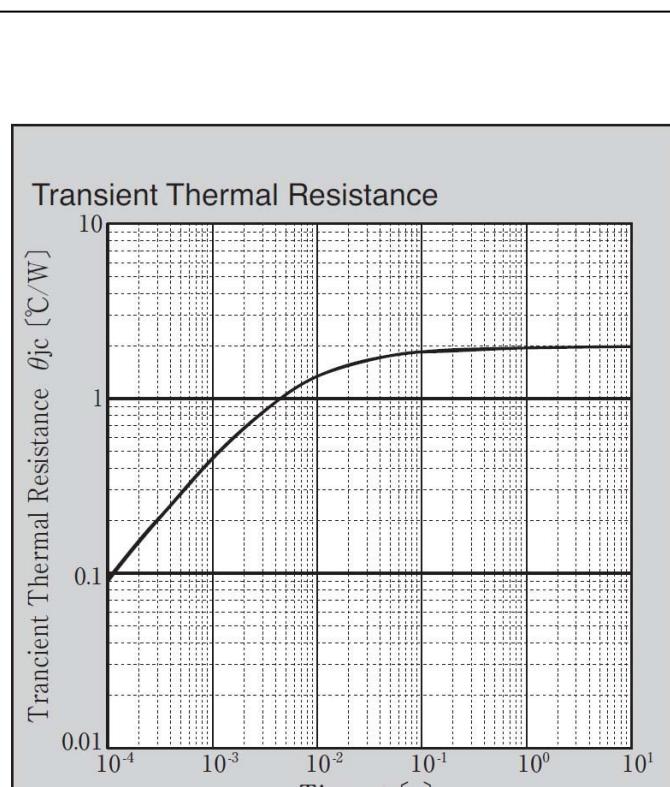
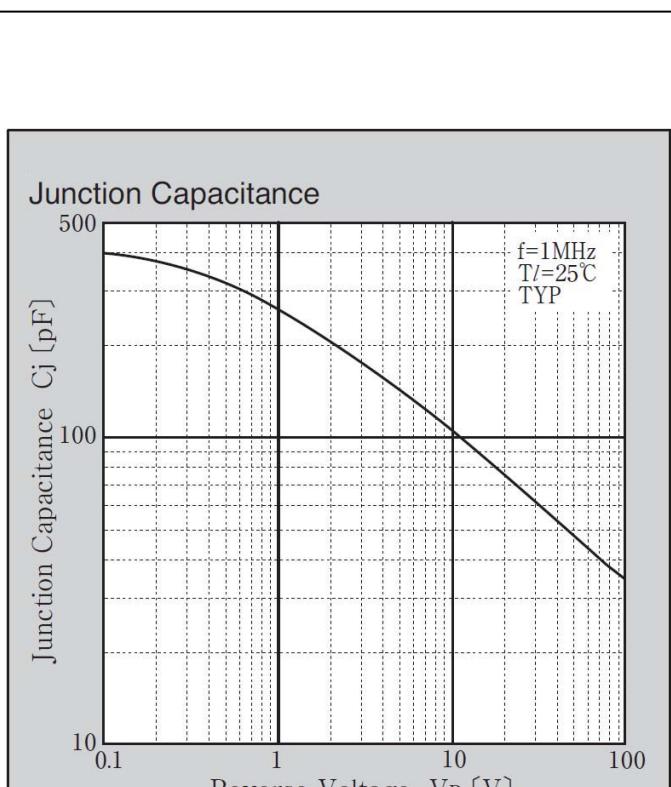
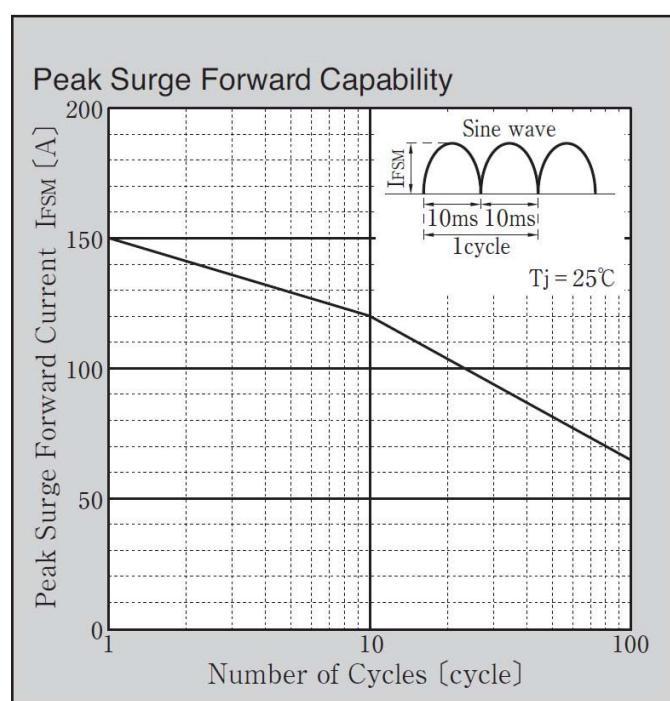
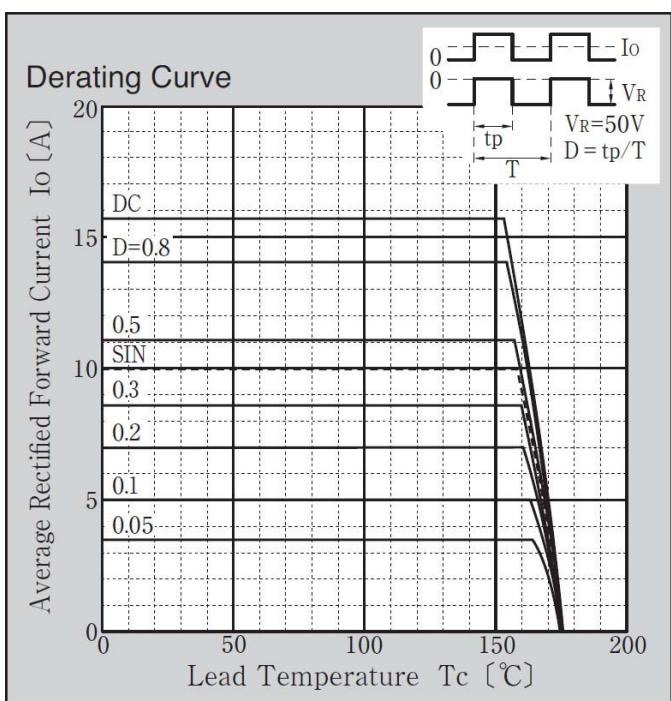


Forward Power Dissipation



Reverse Power Dissipation





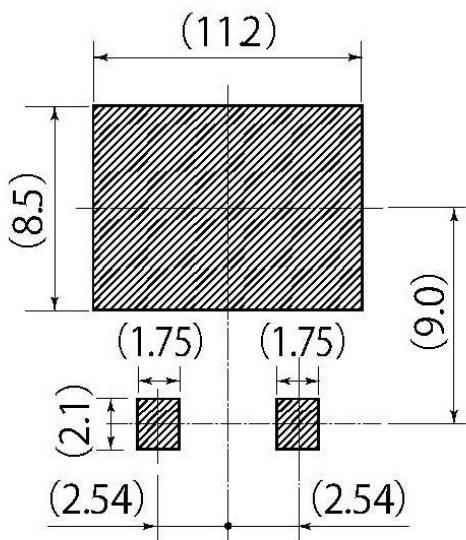
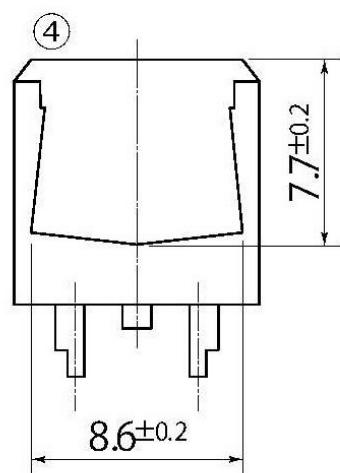
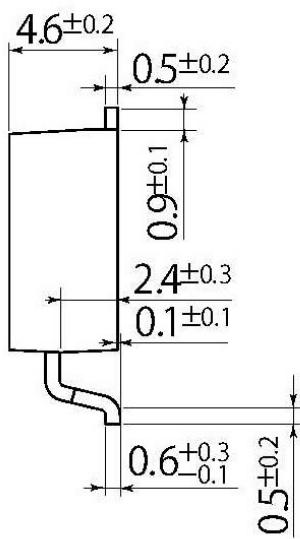
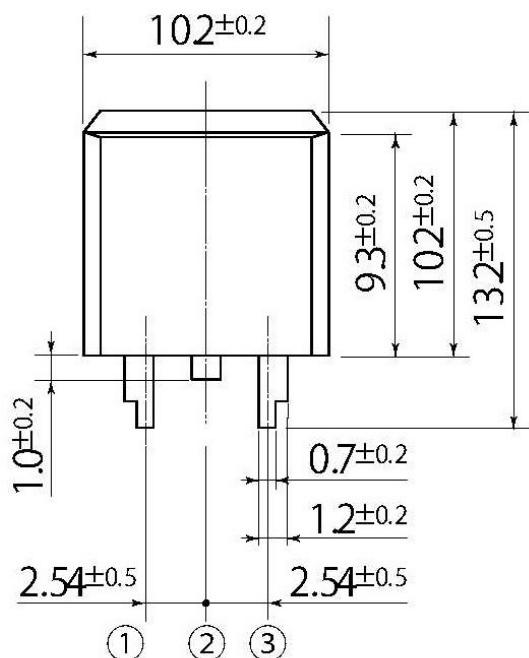
## Outline Dimensions

unit:mm

scale: 3/1

H2

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



Referential Soldering Pad

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

## Notes

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### 【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】

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