

# 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

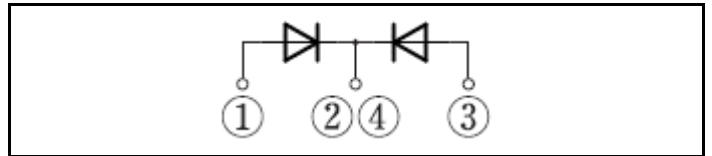
### OUTLINE

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

\* : See the original Specifications

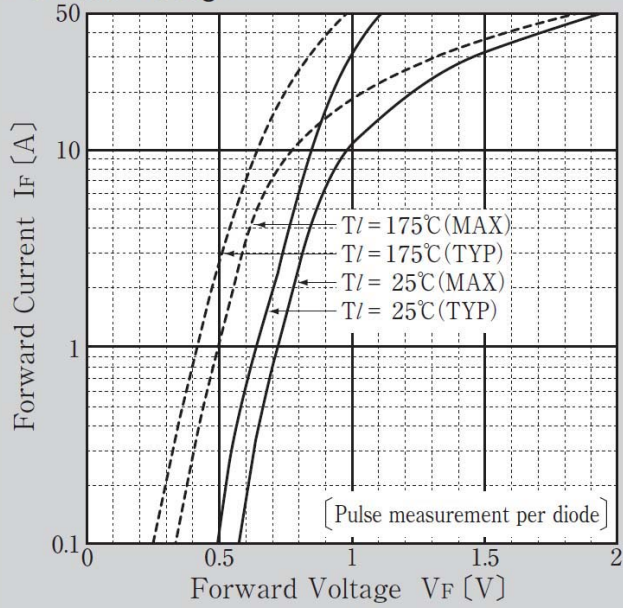
### Electrical Characteristics (unless otherwise specified : $T_c=25^{\circ}\text{C}$ )

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	$I_R$	$V_R=100\text{V}$ , Pulse measurement, per diode			0.015	mA
Total capacitance	$C_t$	$f=1\text{MHz}$ , $V_R=10\text{V}$ , per diode		104		pF
Thermal resistance	$R_{th(j-c)}$	Junction to case			2	$^{\circ}\text{C/W}$

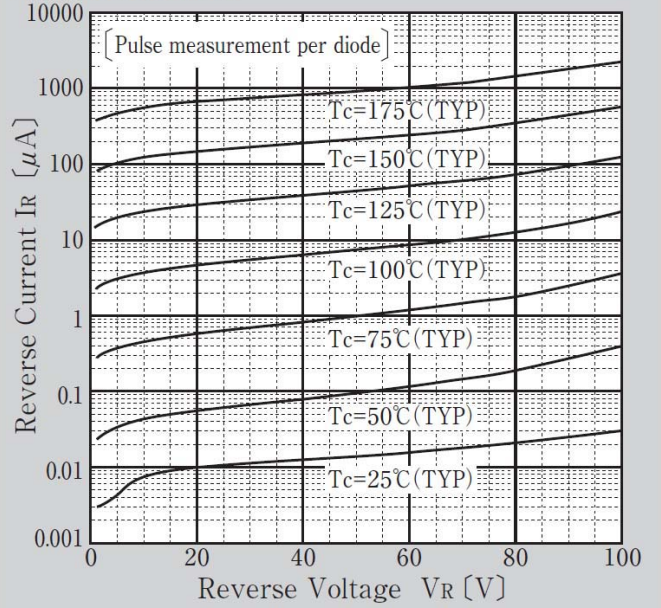
\* : See the original Specifications

# CHARACTERISTIC DIAGRAMS

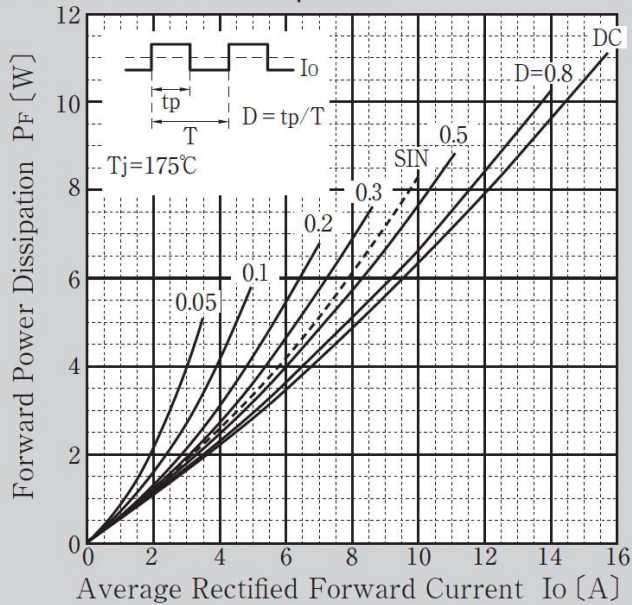
### Forward Voltage



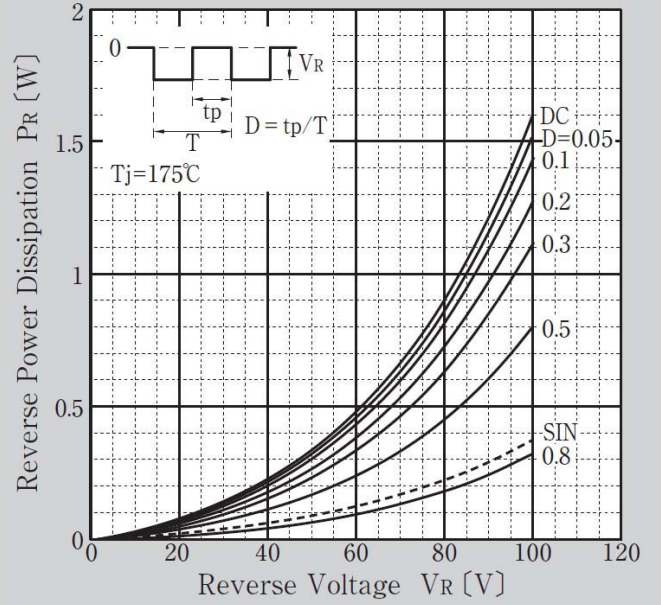
### Reverse Current

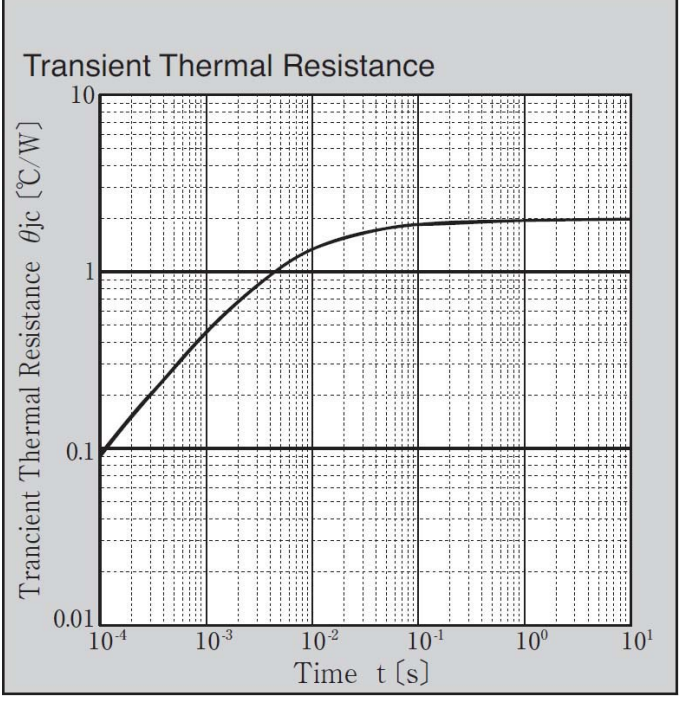
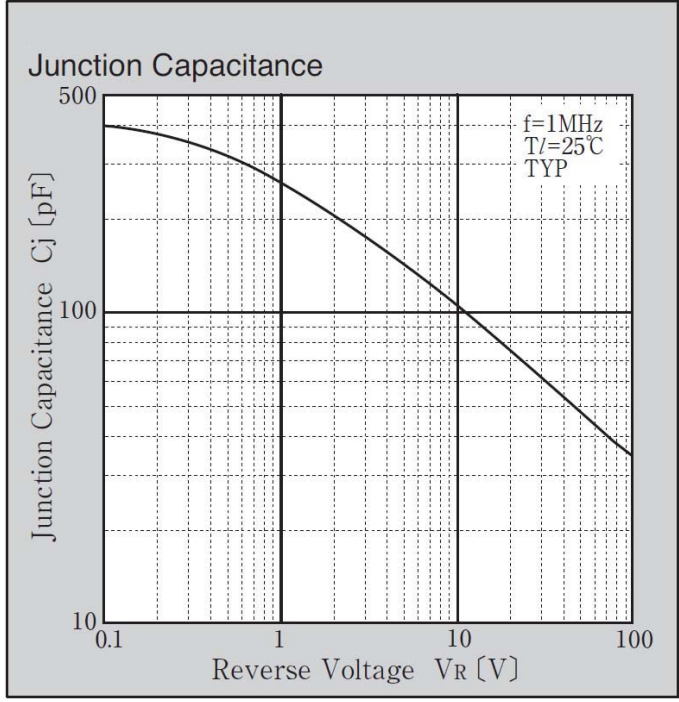
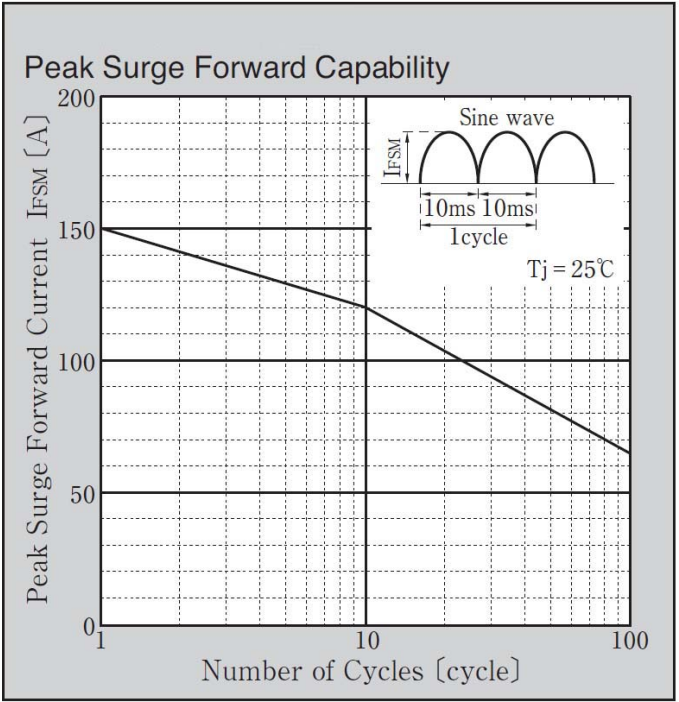
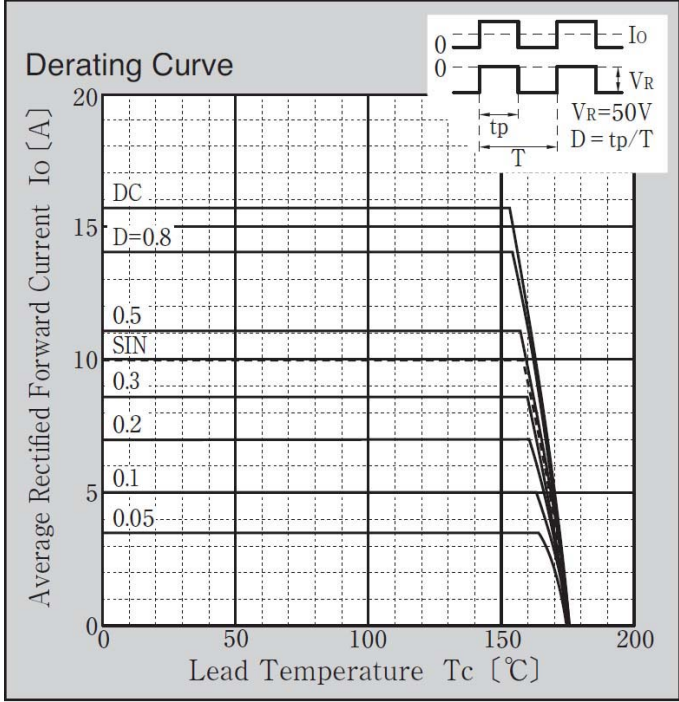


### Forward Power Dissipation



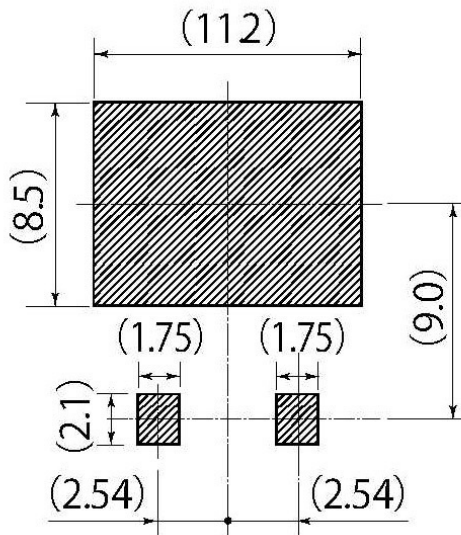
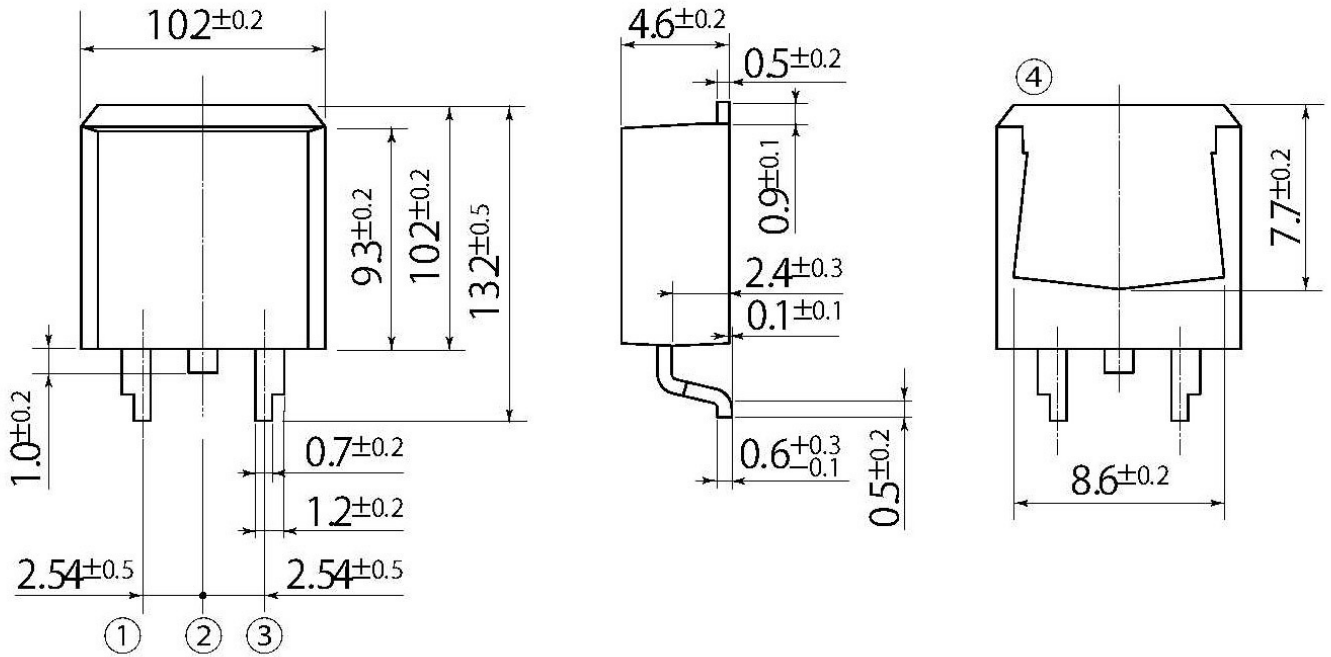
### Reverse Power Dissipation





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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