

D40FDC10ST

Schottky Barrier Diodes

100V, 40A

Feature

- SMD
- Low I_R
- Available for automotive use
- Pb free terminal
- RoHS:Yes

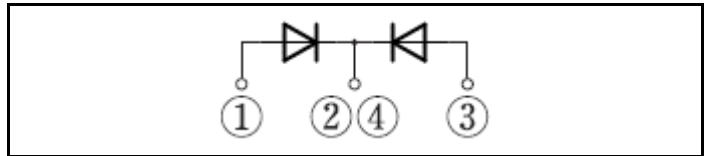
OUTLINE

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 150	$^\circ\text{C}$
Junction temperature	T_j		-55 to 150	$^\circ\text{C}$
Repetitive peak reverse voltage	V_{RRM}		100	V
Average forward current	$I_F(AV)$	50Hz sine wave, Resistance load, Rating for each diode $I_F(AV)/2$, With heatsink, $T_c=105^\circ\text{C}$	40	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1 cycle, Peak value, $T_j=25^\circ\text{C}$	400	A

* :See the original Specifications

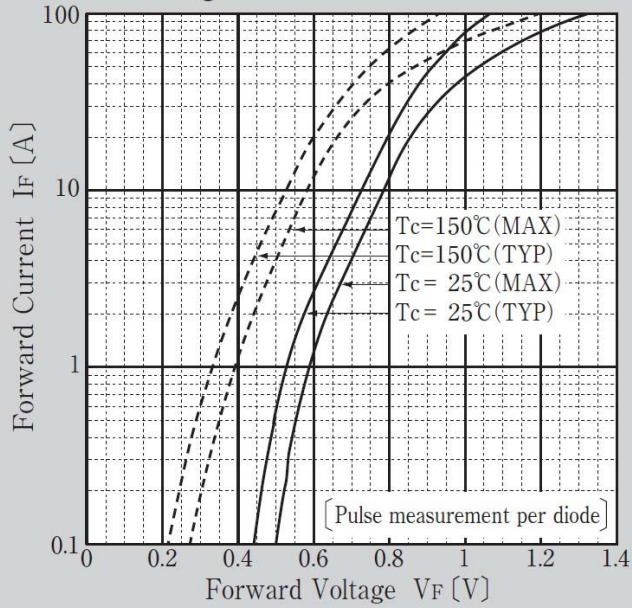
Electrical Characteristics (unless otherwise specified : $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	$I_F=20\text{A}$, Pulse measurement, per diode		0.8	0.86	V
Reverse current	I_R	$V_R=100\text{V}$, Pulse measurement, per diode			0.06	mA
Total capacitance	C_t	$f=1\text{MHz}$, $V_R=10\text{V}$, per diode		360		pF
Thermal resistance	$R_{th(j-c)}$	Junction to case, With heatsink			1.3	$^\circ\text{C/W}$

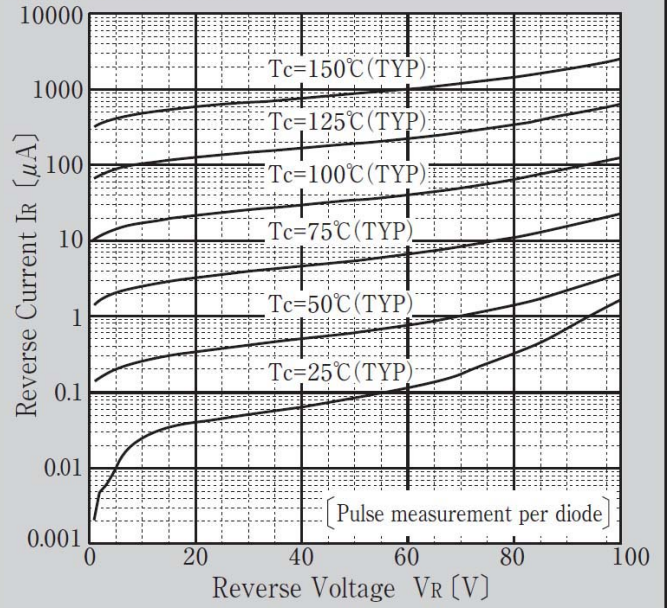
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

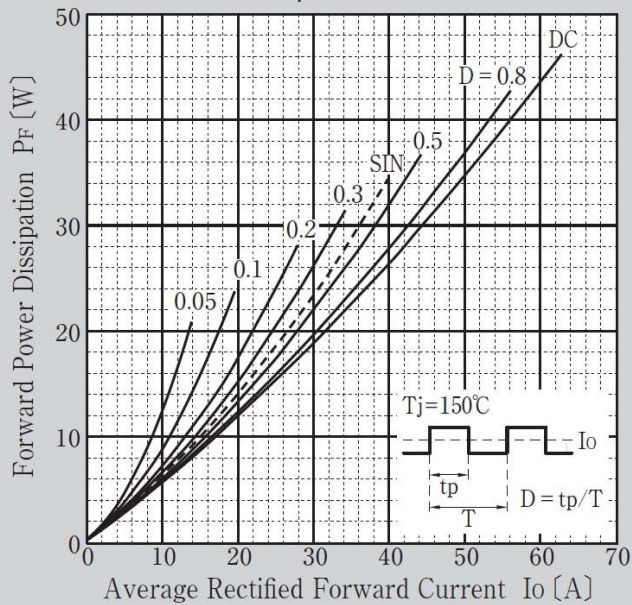
Forward Voltage



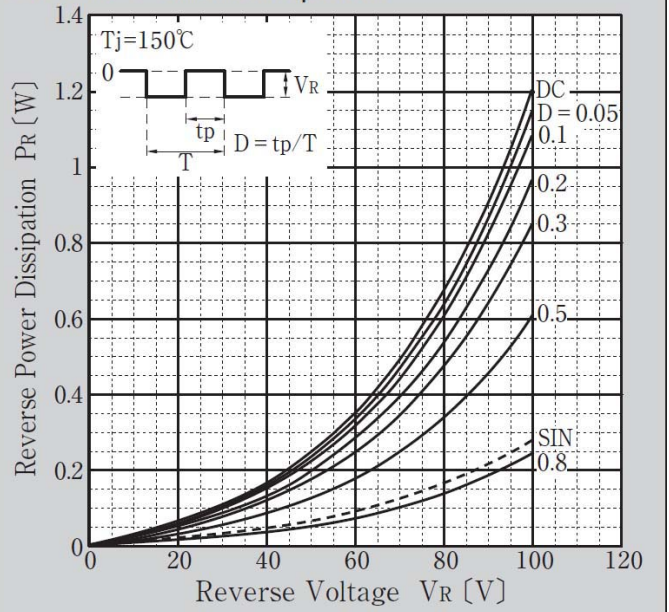
Reverse Current

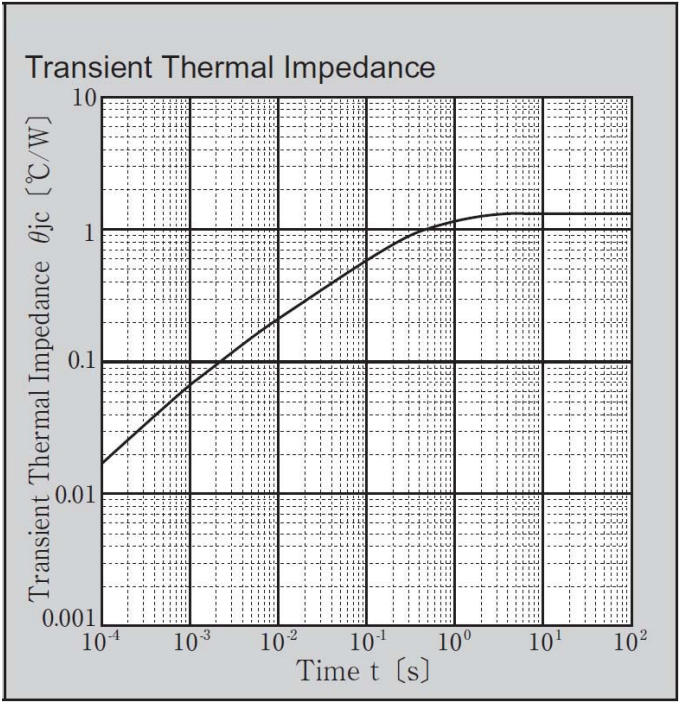
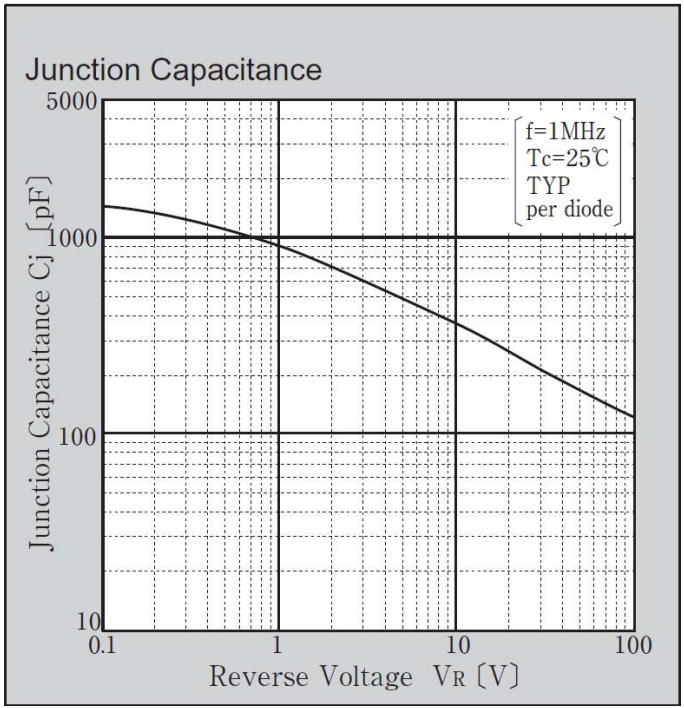
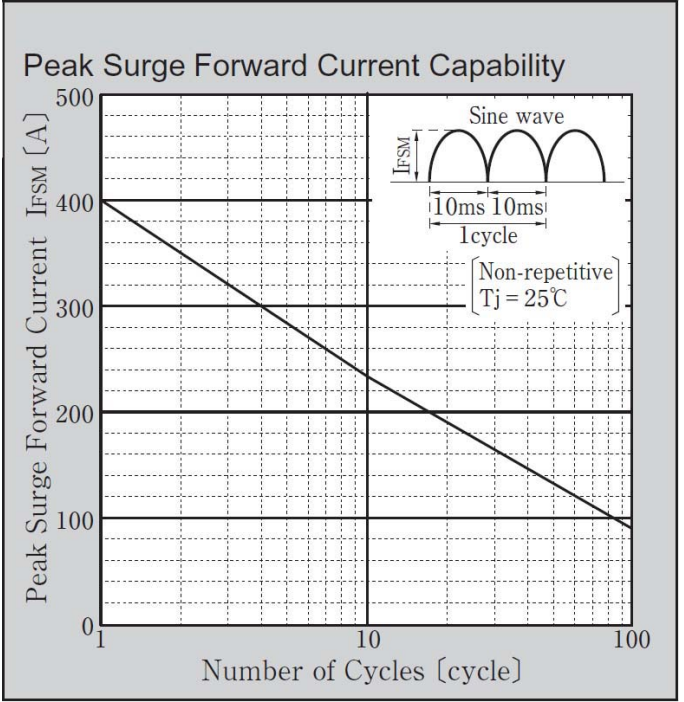
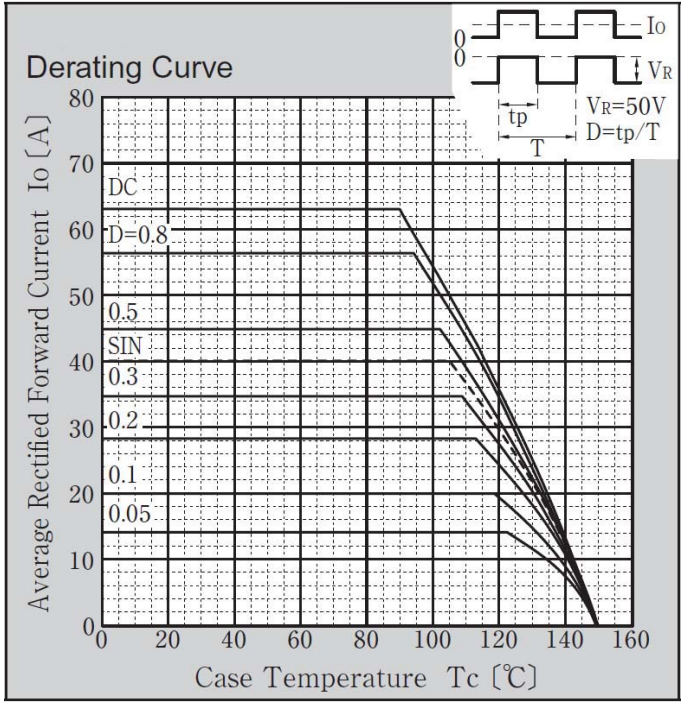


Forward Power Dissipation



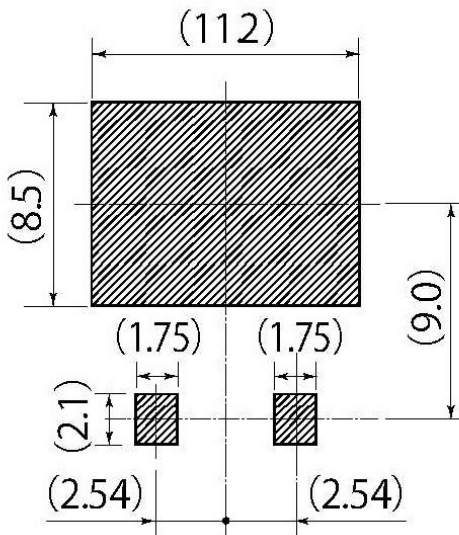
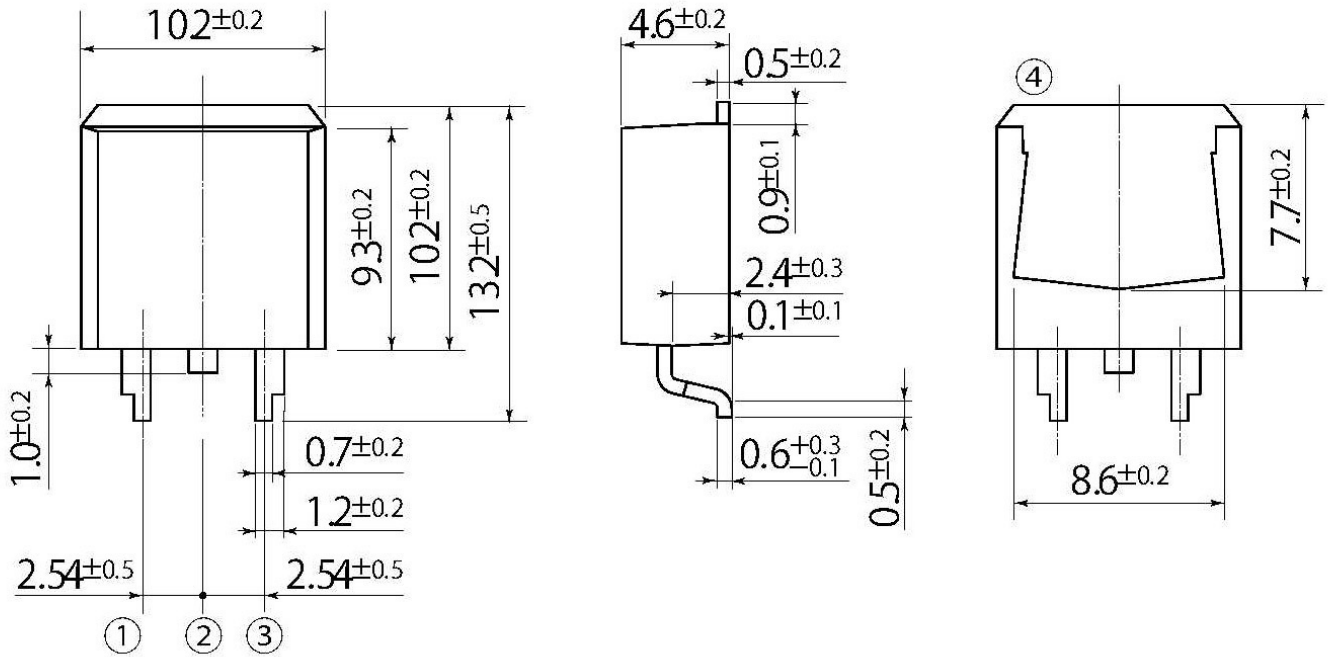
Reverse Power Dissipation





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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