

D8FD60LUS

Fast Recovery Diodes
600V, 8A

Feature

- SMD
- High Voltage
- Low Noise
- Available for automotive use
- Pb free terminal
- RoHS:Yes

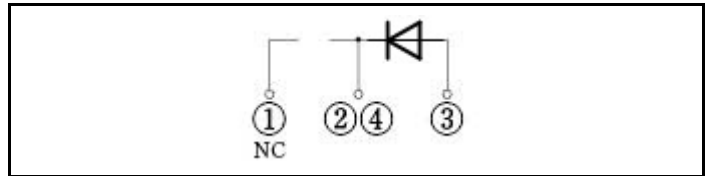
OUTLINE

Package (House Name): FD

Package (JEITA Code): SC-83 similar



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : T_c=25°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}		600	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, T _c =120°C	8	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, T _j =25°C	60	A
Surge forward current	I _{FSM1}	t _p =1ms, Sine wave, Non-repetitive, Peak value, T _j =25°C	120	A

※ :See the original Specifications

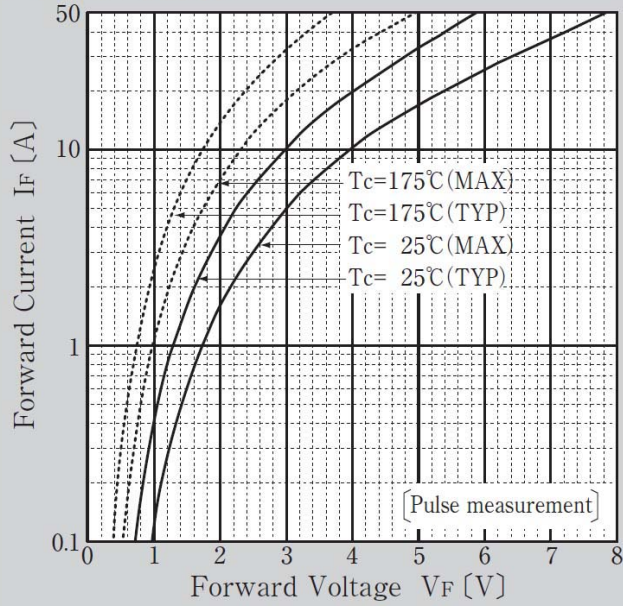
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =8A, Pulse measurement			3.6	V
Reverse current	I _R	V _R =600V, Pulse measurement			50	μA
Reverse recovery time	t _{rr}	I _F =0.5A, I _R =1.0A, 0.1I _R			25	ns
Total capacitance	C _t	f=1MHz, V _R =10V		24		pF
Thermal resistance	R _{th(j-c)}	Junction to case			2.3	°C/W

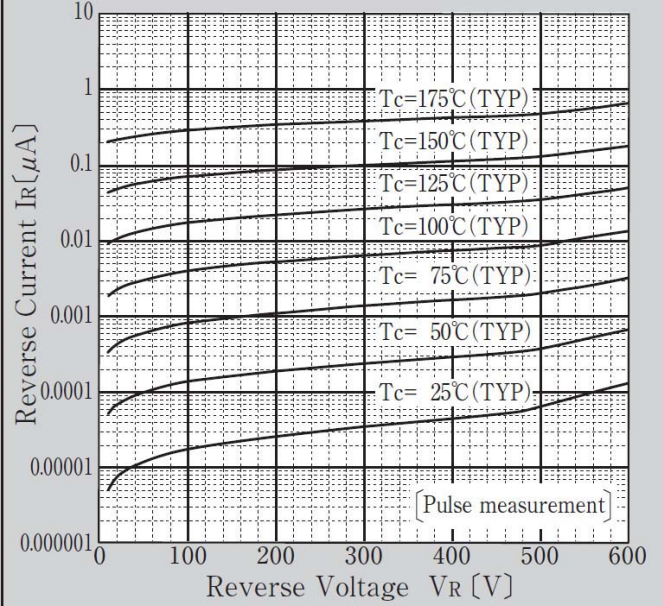
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

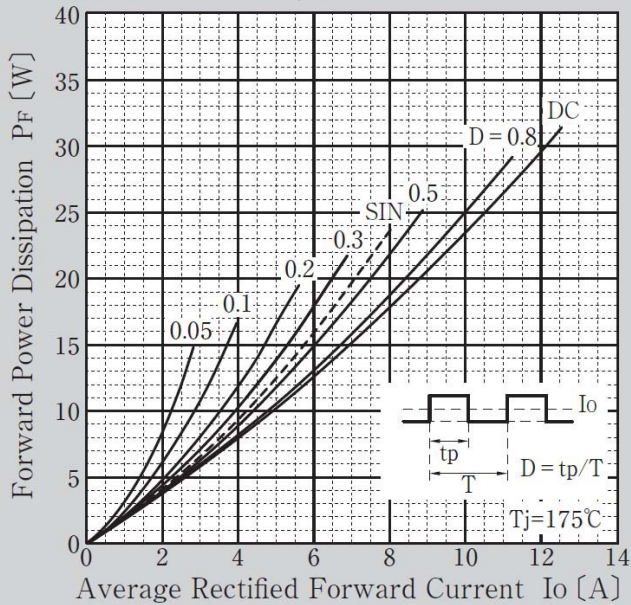
Forward Voltage



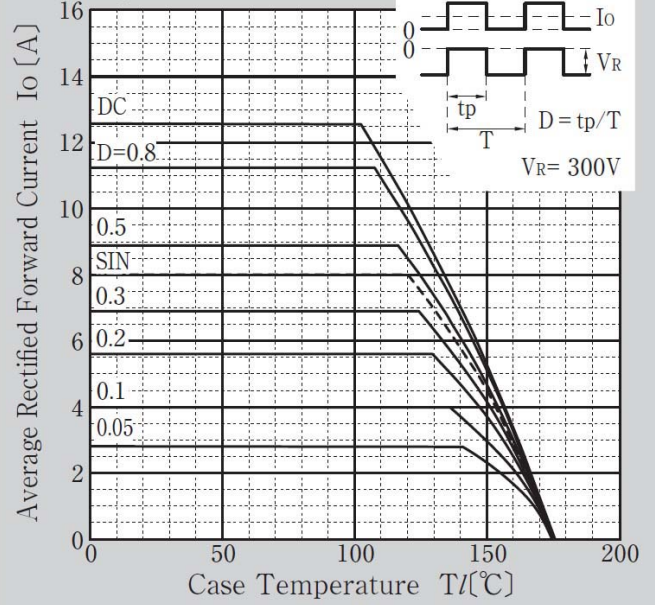
Reverse Current



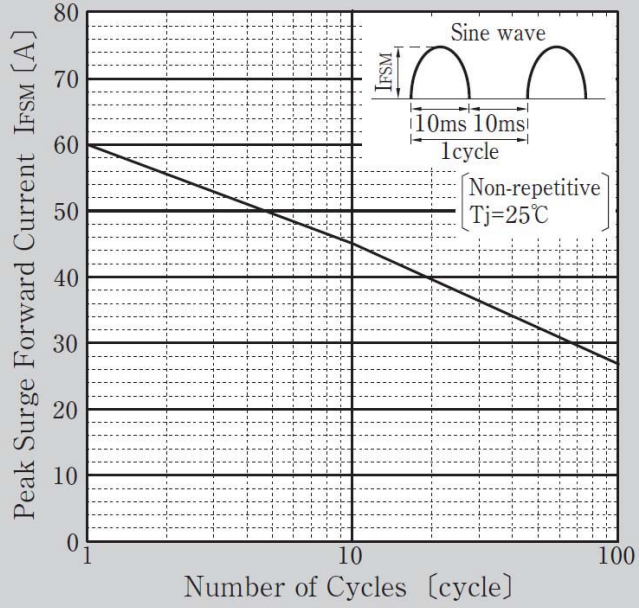
Forward Power Dissipation



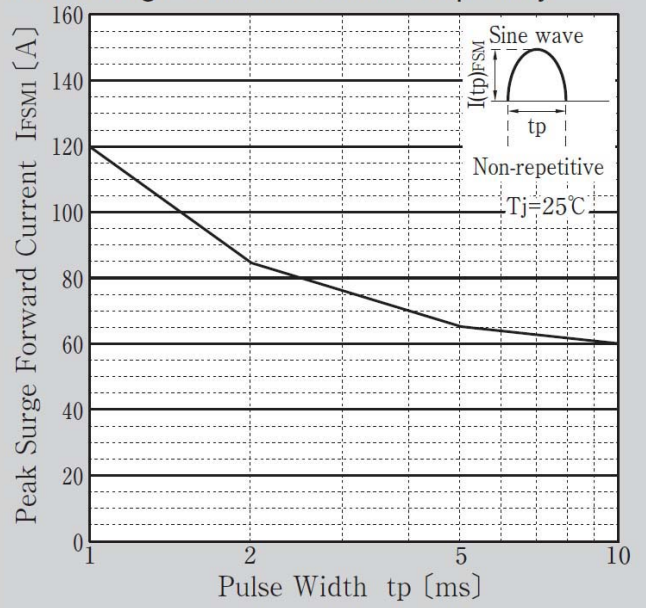
Derating Curve



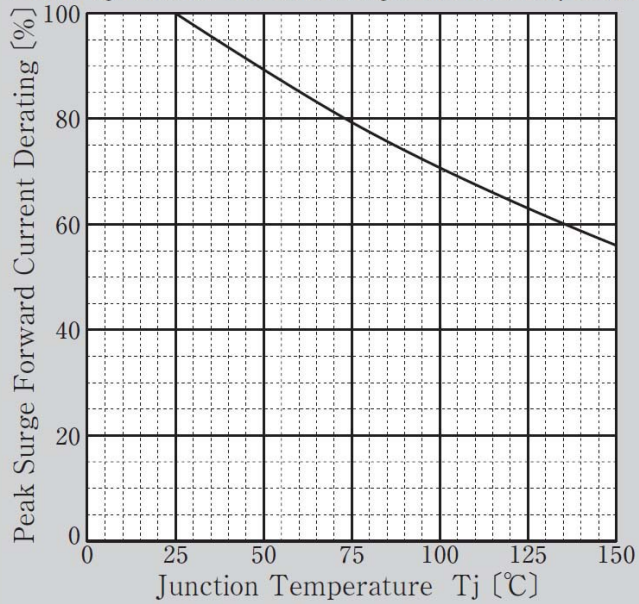
Peak Surge Forward Current Capability



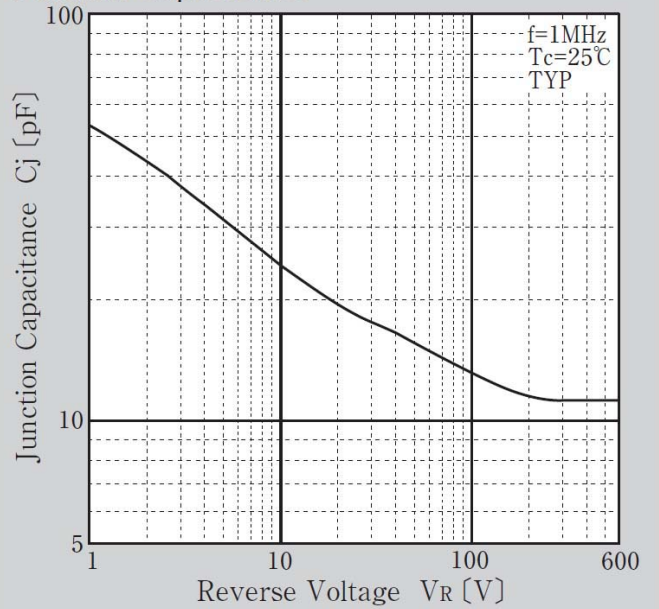
Peak Surge Forward Current Capability



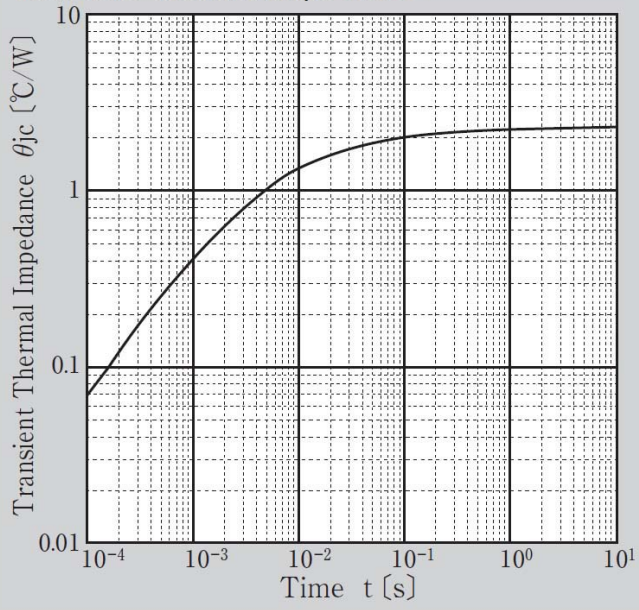
Peak Surge Forward Current Derating vs Junction Temperature



Junction Capacitance

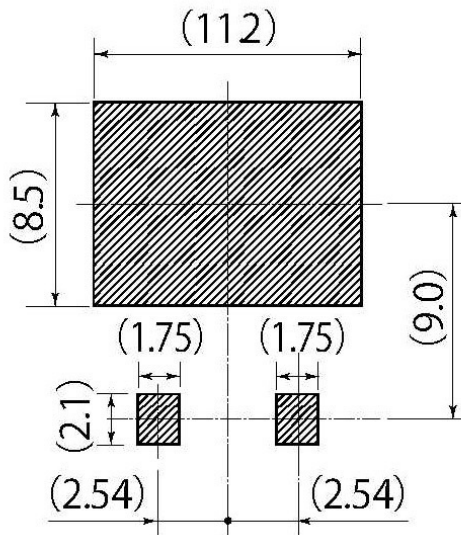
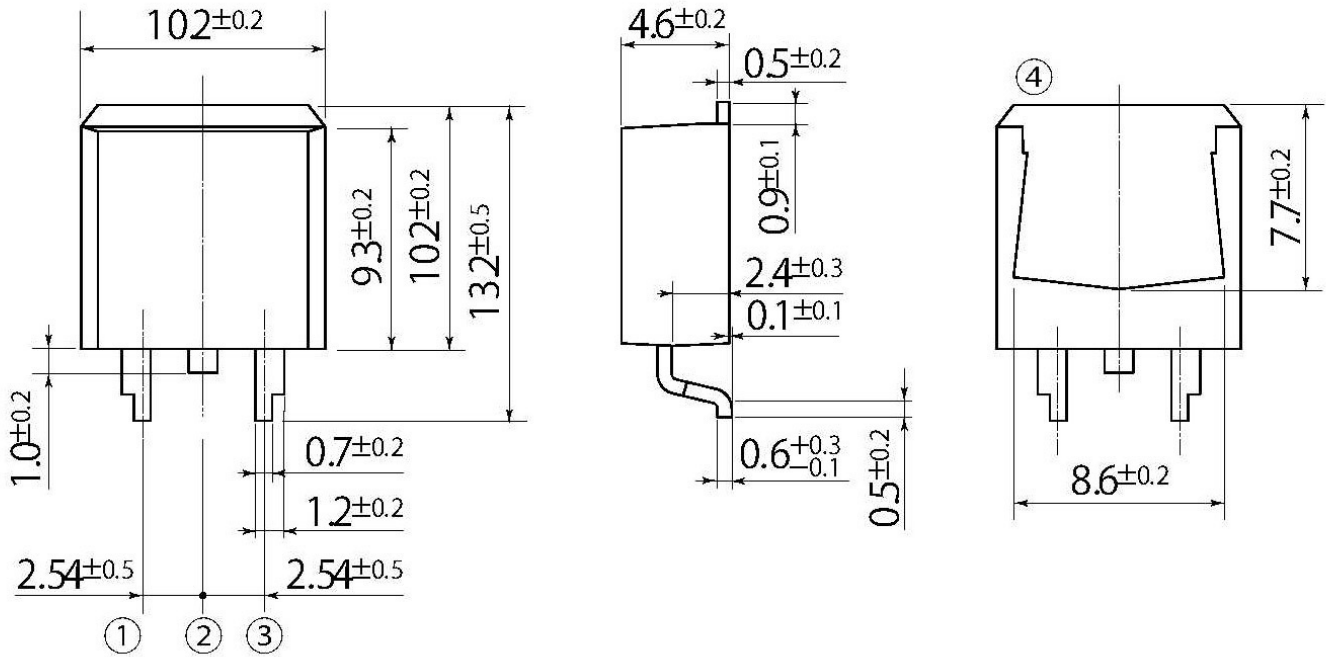


Transient Thermal Impedance



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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 - 【Specific applications】
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