

D20FD60LU

Fast Recovery Diodes

600V, 20A

Feature

- SMD
- High Voltage
- Low Noise
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

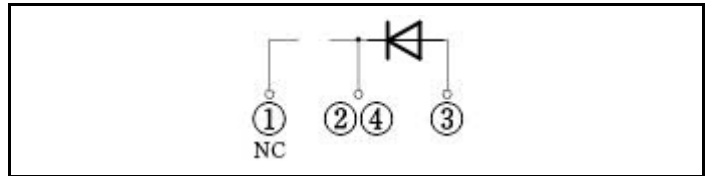
OUTLINE

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 temperature	T _{stg}		-55 to 150	°C
Junction temperature	T _j		-55 to 150	°C
Repetitive peak reverse voltage	V _{RRM}		600	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, with heatsink, T _c =93°C	20	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, T _j =25°C	160	A
Surge forward current	I _{FSM1}	t _p =1ms, Sine wave, Non-repetitive, Peak value, T _j =25°C	300	A

※ :See the original Specifications

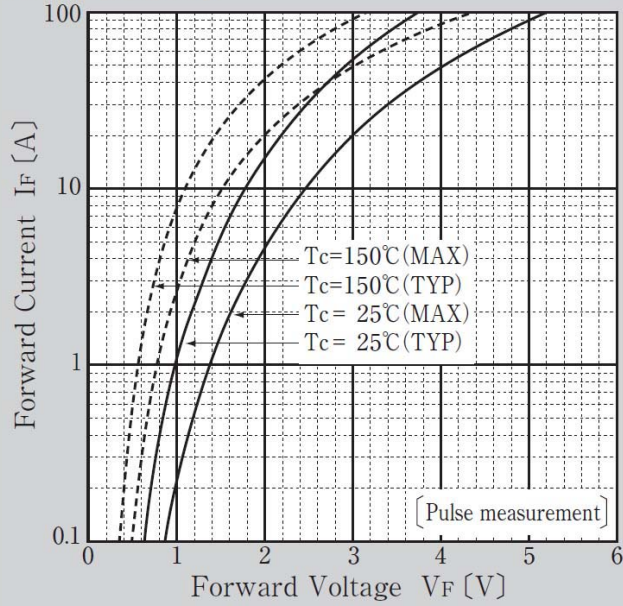
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_F	IF=20A, Pulse measurement			3	V
Reverse current	I_R	VR=600V, Pulse measurement			25	μ A
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.1IR			35	ns
Total capacitance	Ct	f=1MHz, VR=10V		105		pF
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			0.9	°C/W

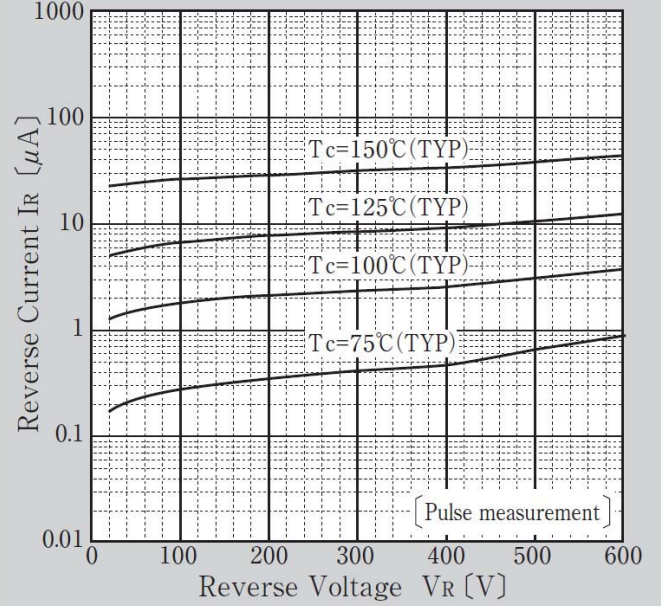
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

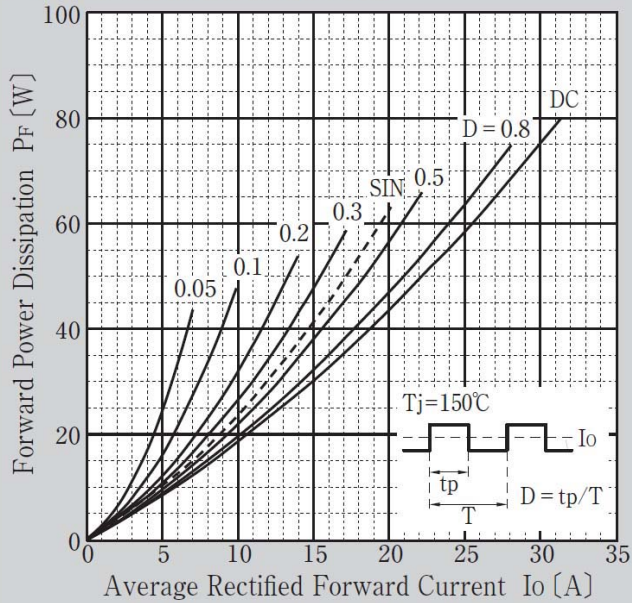
Forward Voltage



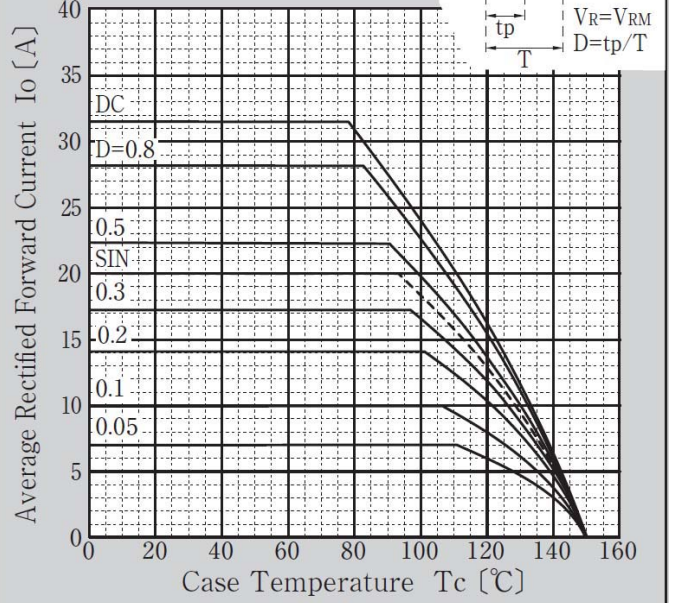
Reverse Current



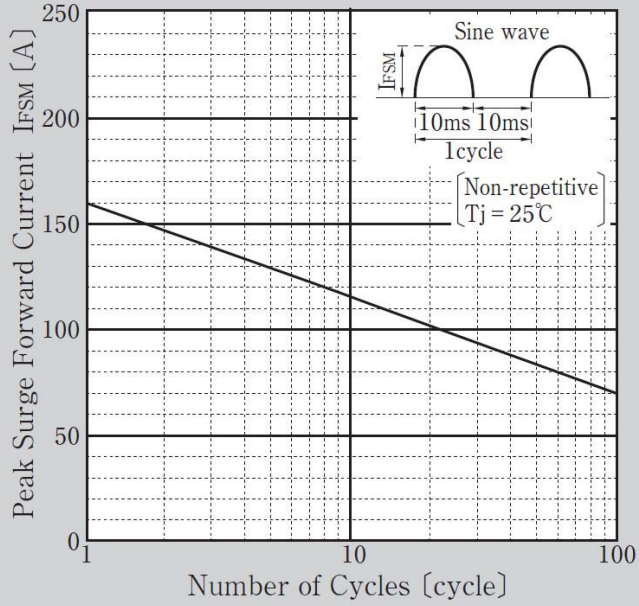
Forward Power Dissipation



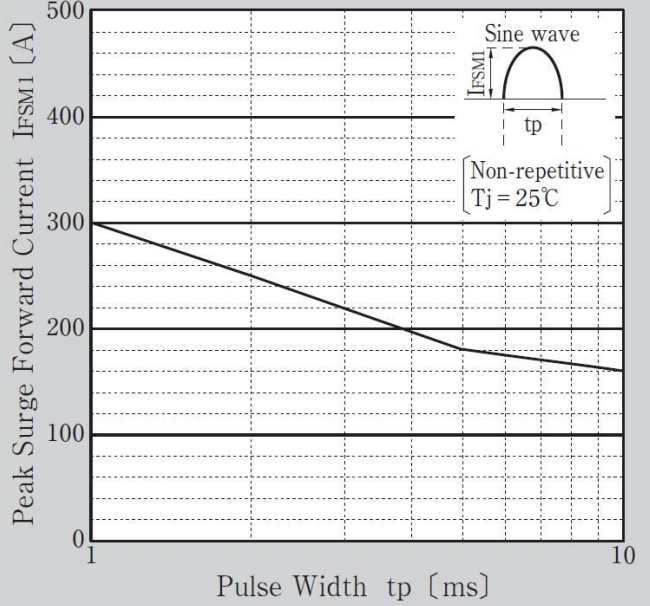
Derating Curve



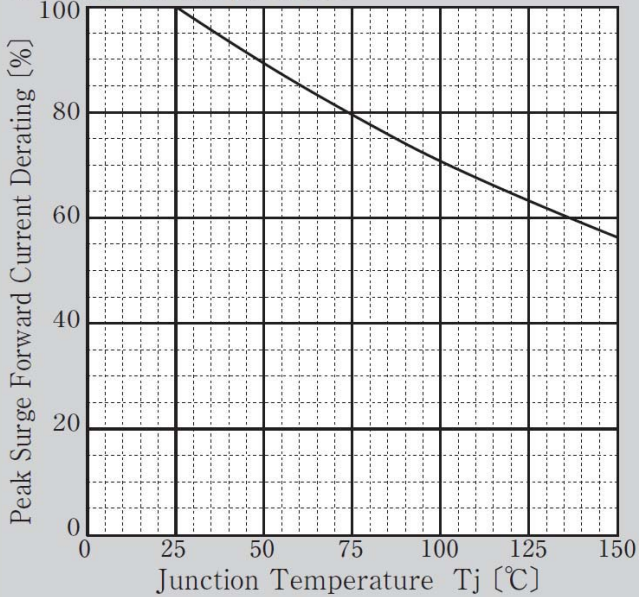
Peak Surge Forward Current Capability



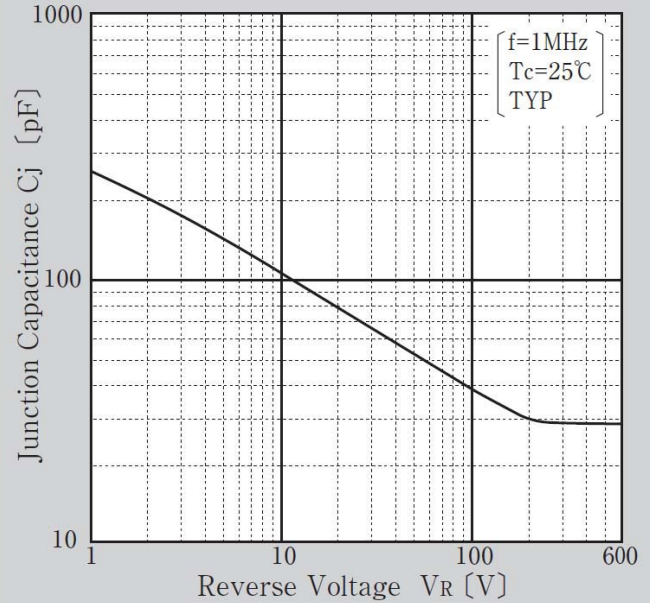
Peak Surge Forward Capability

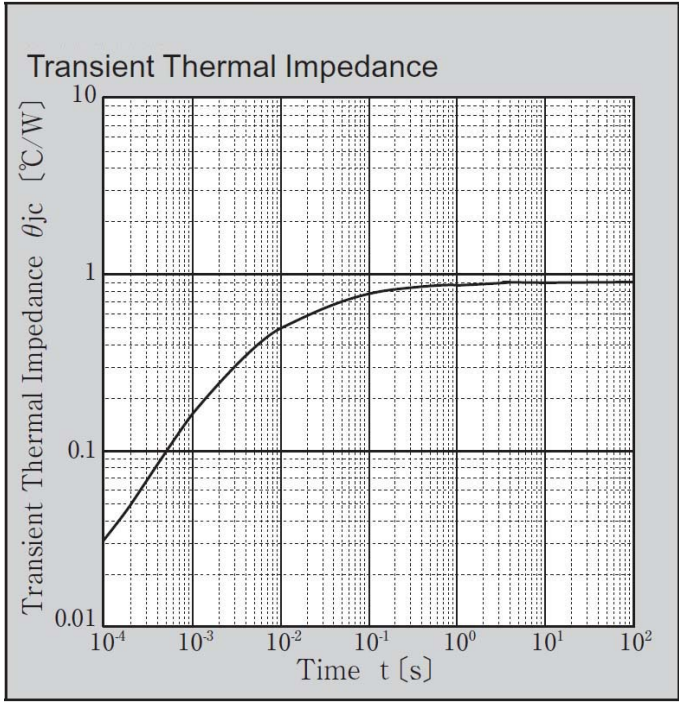


Peak Surge Forward Current Derating vs Junction Temperature



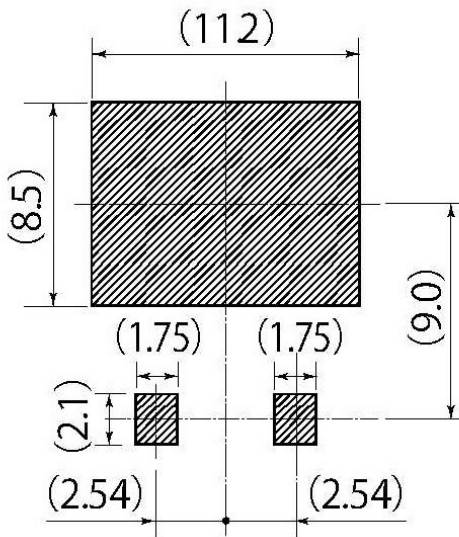
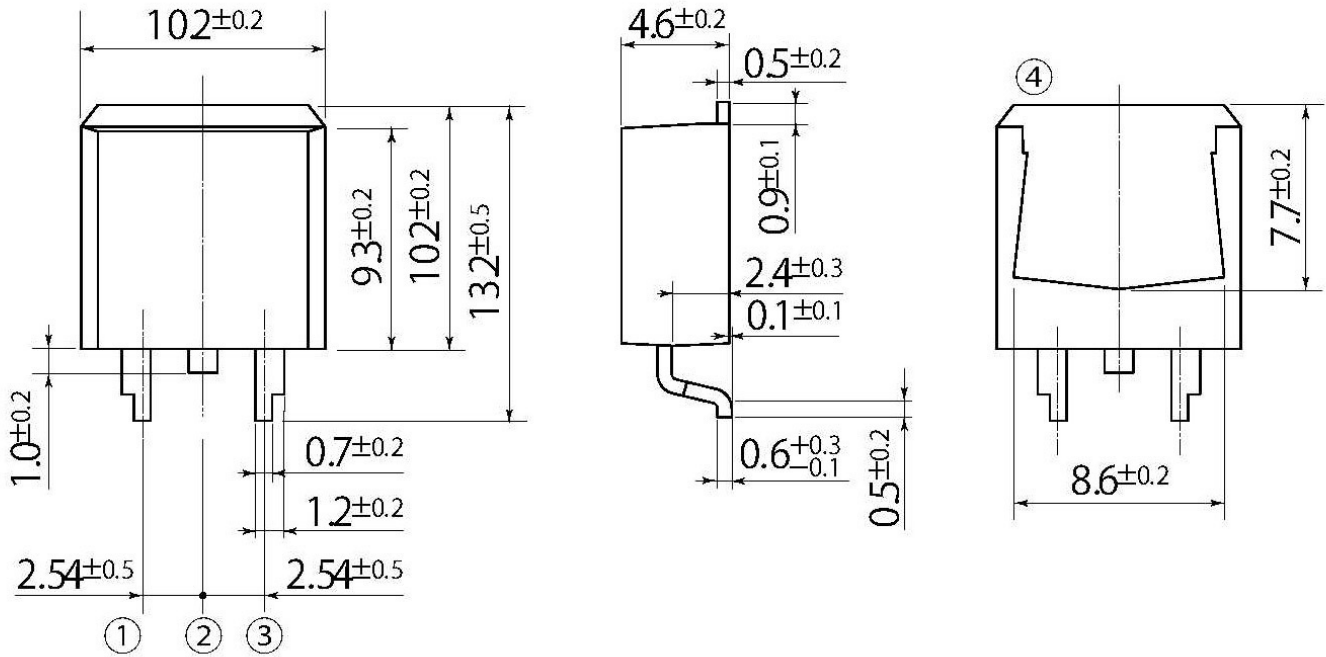
Junction Capacitance





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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