

# D20FD60LU

## Fast Recovery Diodes

600V, 20A

### Feature

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

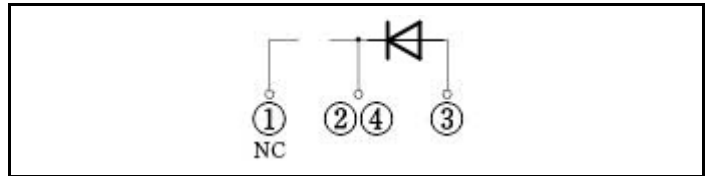
### OUTLINE

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

※ :See the original Specifications

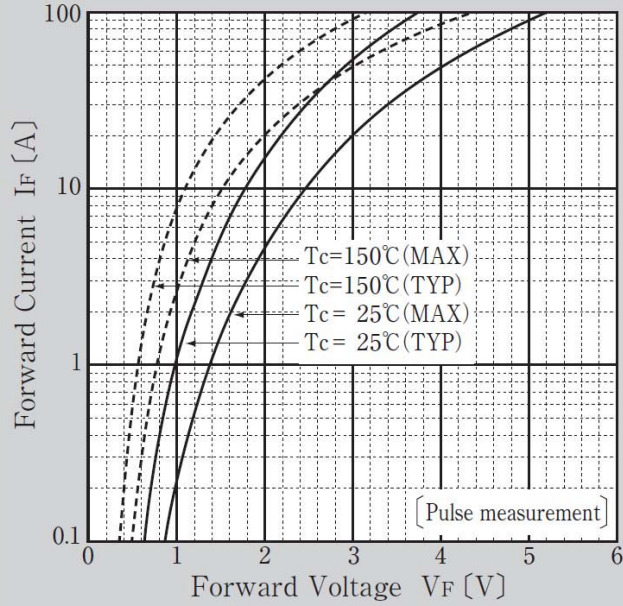
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

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	$\mu$ 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

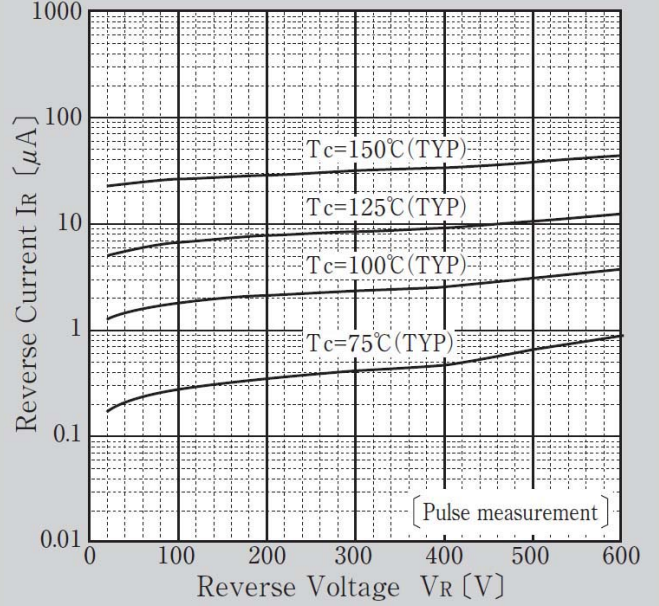
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

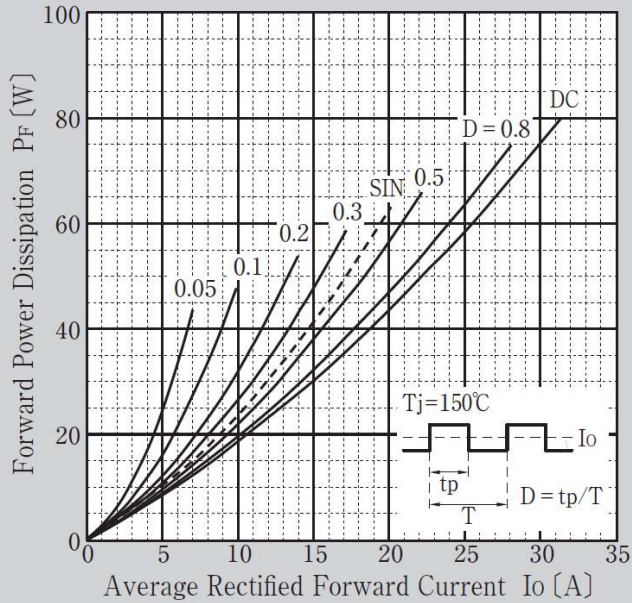
### Forward Voltage



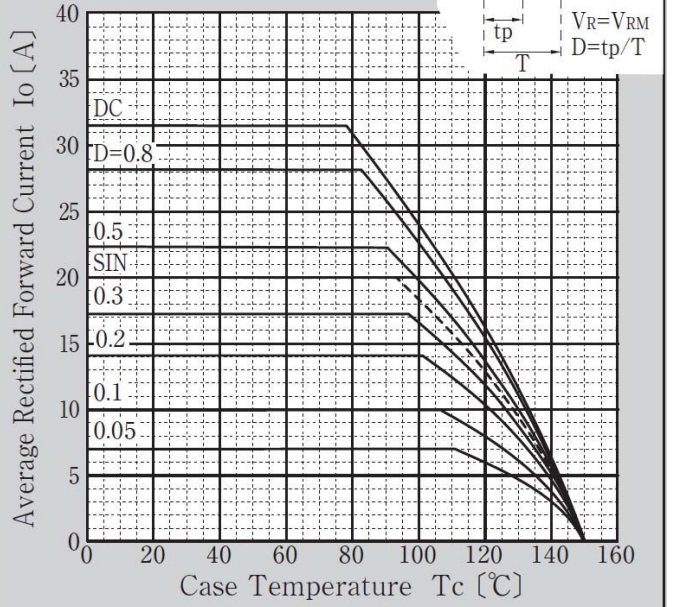
### Reverse Current



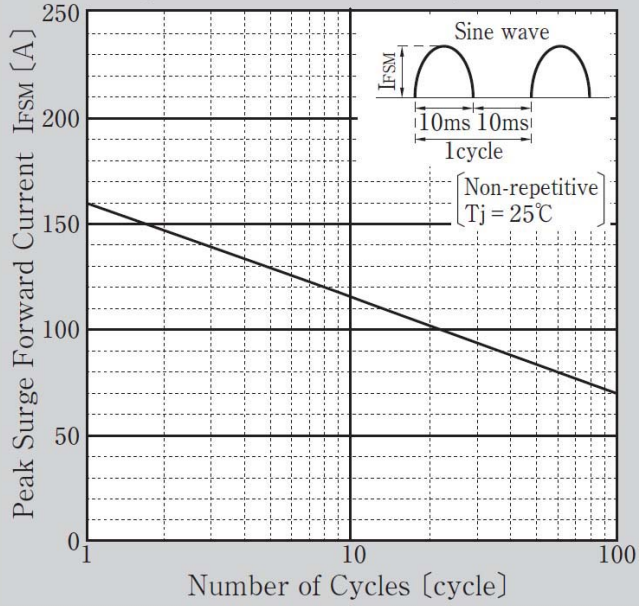
### Forward Power Dissipation



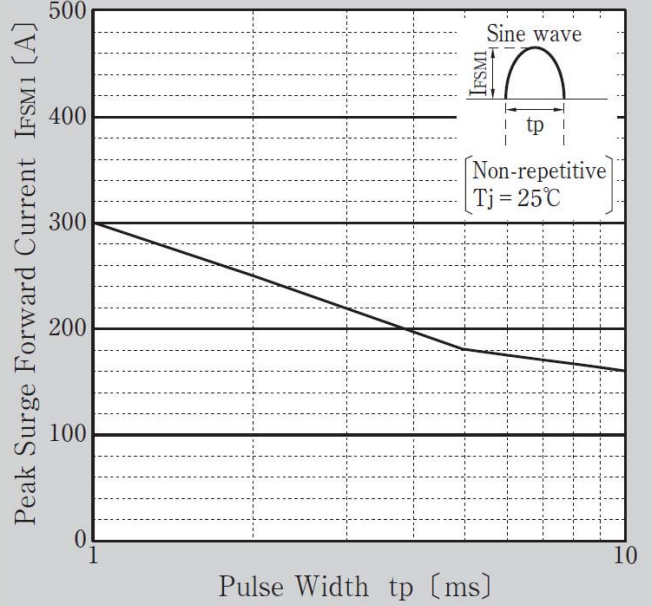
### Derating Curve



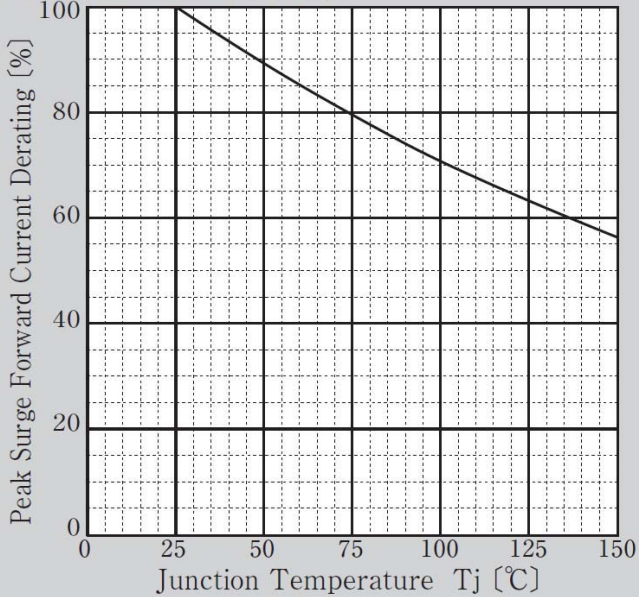
Peak Surge Forward Current Capability



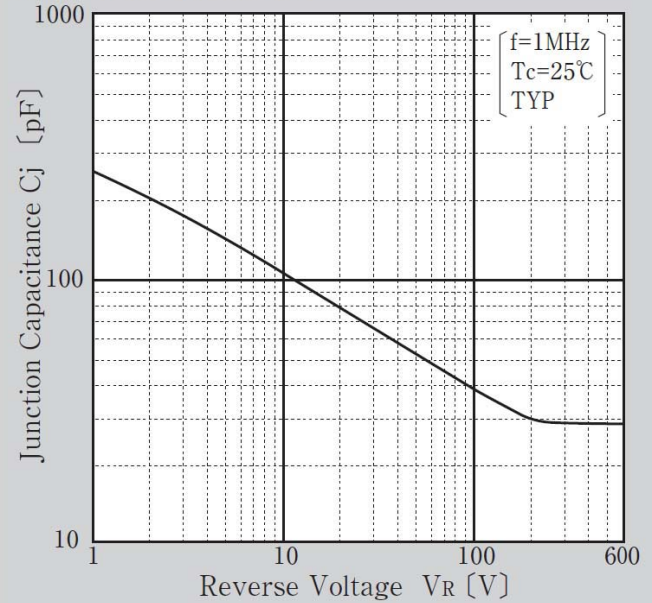
Peak Surge Forward Capability

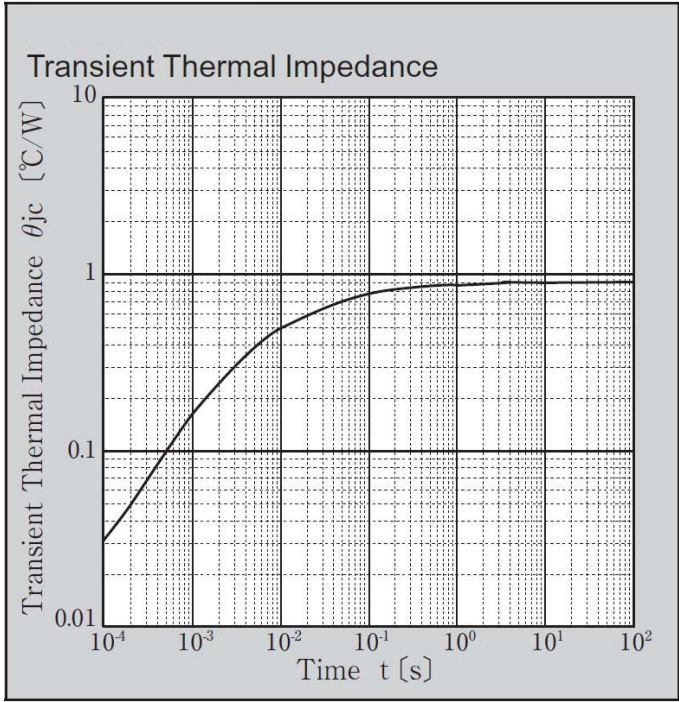


Peak Surge Forward Current Derating vs Junction Temperature



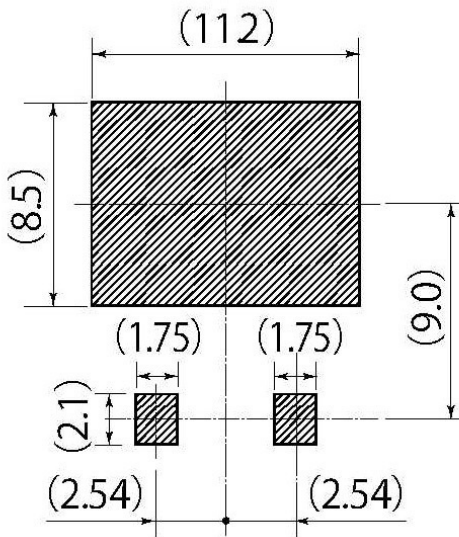
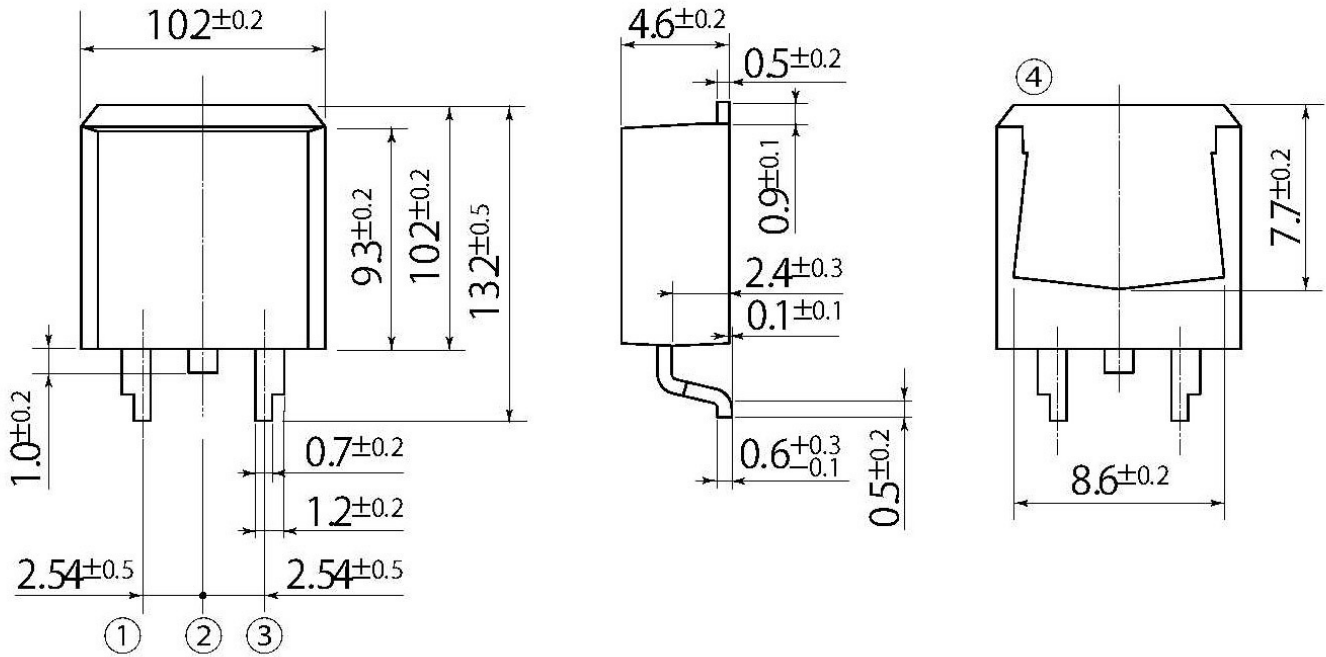
Junction Capacitance





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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