

D20FDC20L

Fast Recovery Diodes

200V, 20A

Feature

- SMD
- High Recovery Speed
- Based on AEC-Q101
- Pb free terminal
- RoHS:Yes

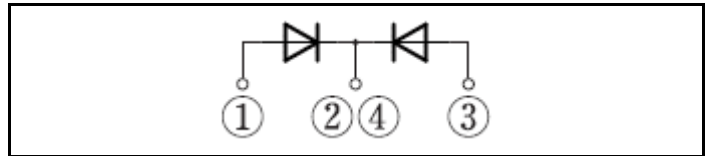
OUTLINE

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 175	°C
Junction temperature	T _j		175	°C
Repetitive peak reverse voltage	V _{RRM}		200	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Rating for each diode I _{F(AV)} /2, T _c =113°C	20	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, T _j =25°C	100	A
Surge forward current	I _{FSM1}	t _p =1ms, Sine wave, Non-repetitive, 1 cycle, Peak value, T _j =25°C	215	A

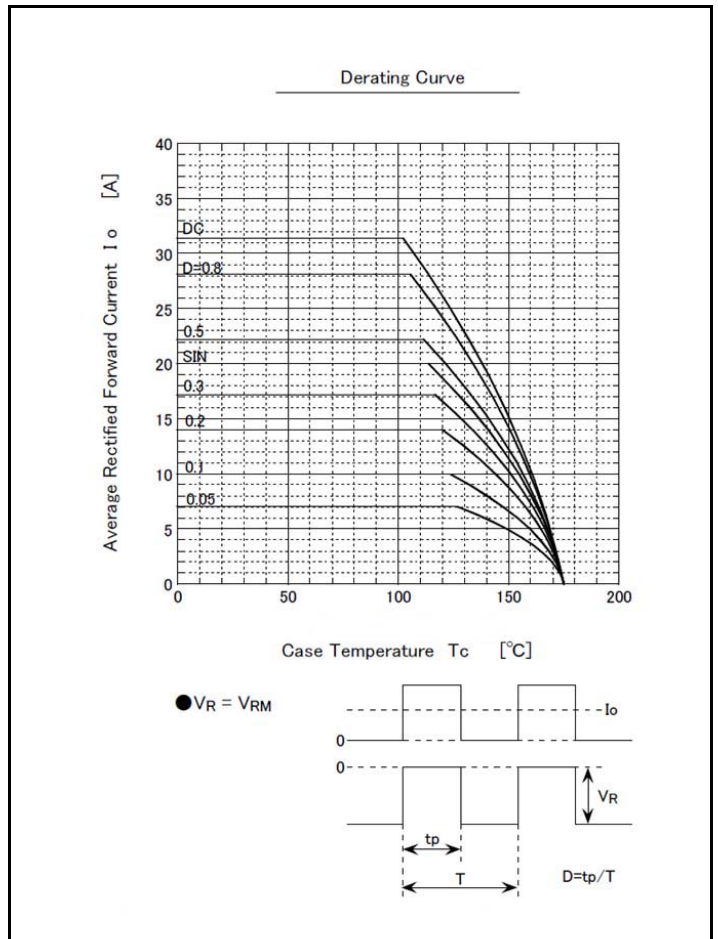
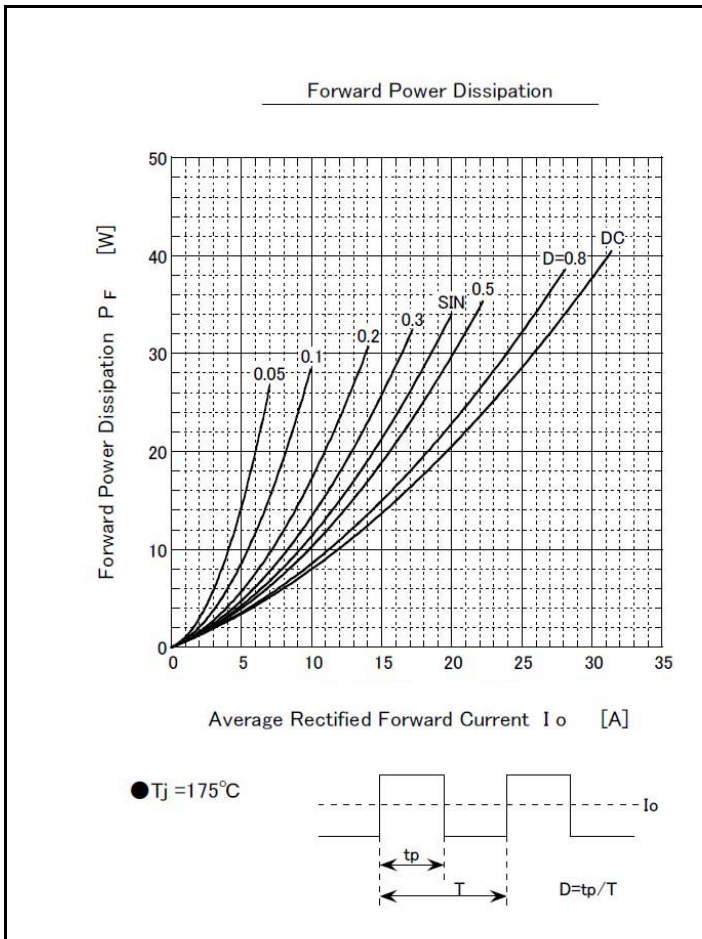
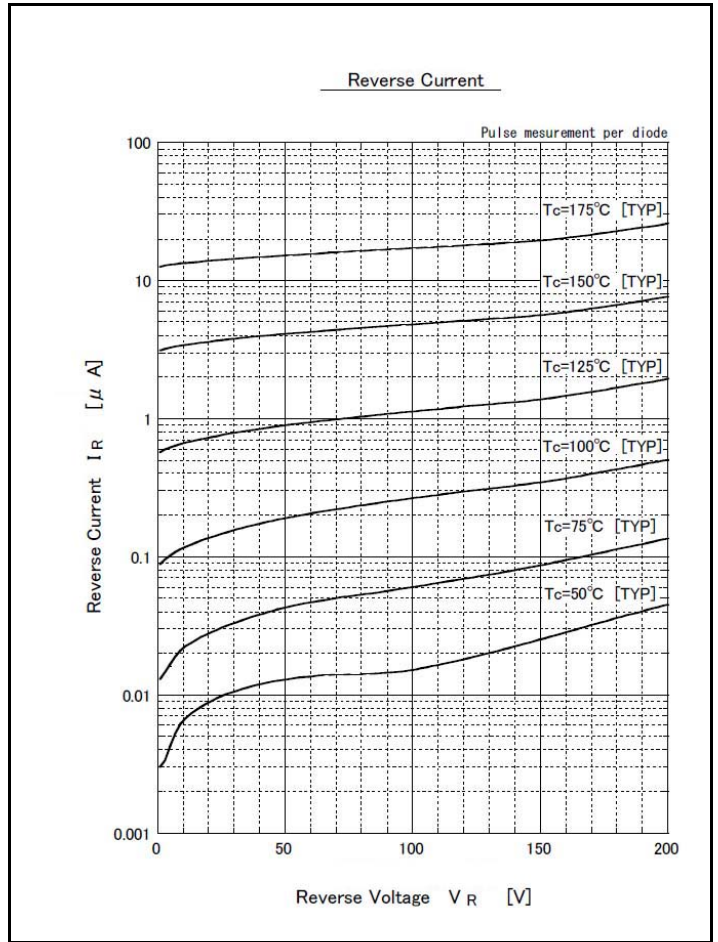
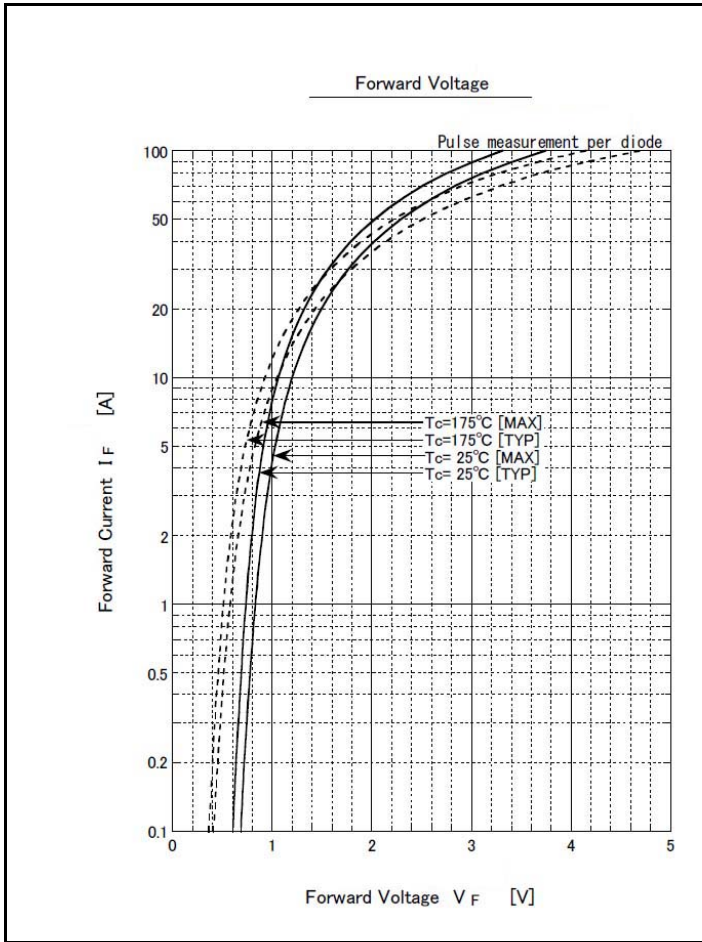
* :See the original Specifications

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

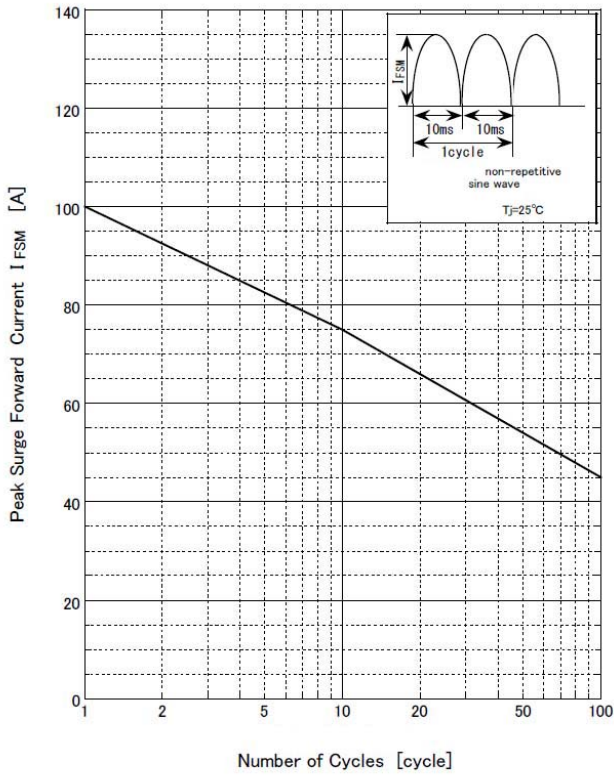
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	IF=10A, Pulse measurement, Per diode			1.2	V
Reverse current	I _R	VR=200V, Pulse measurement, Per diode			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR, Per Diode			30	ns
Total capacitance	Ct	f=1MHz, VR=10V, Per Diode		71		pF
Thermal resistance	Rth(j-c)	Junction to case			1.8	°C/W

* :See the original Specifications

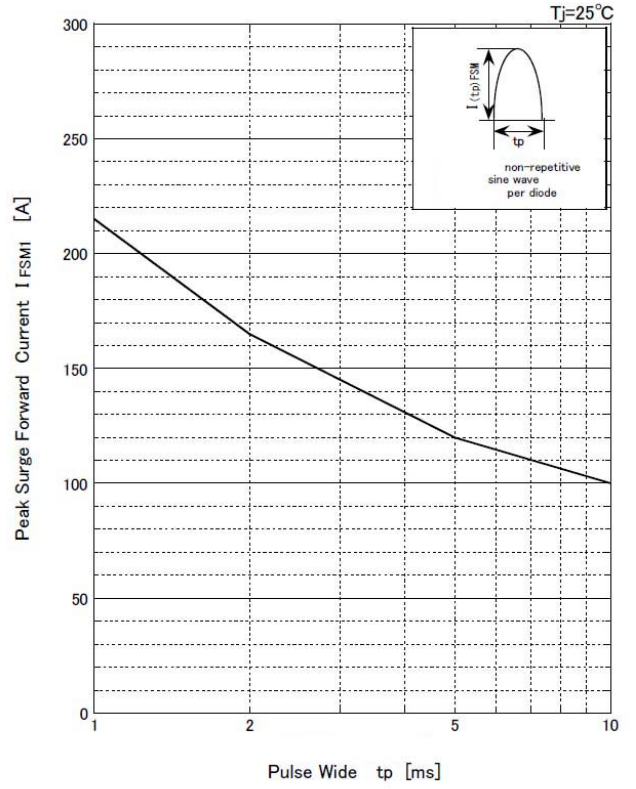
CHARACTERISTIC DIAGRAMS



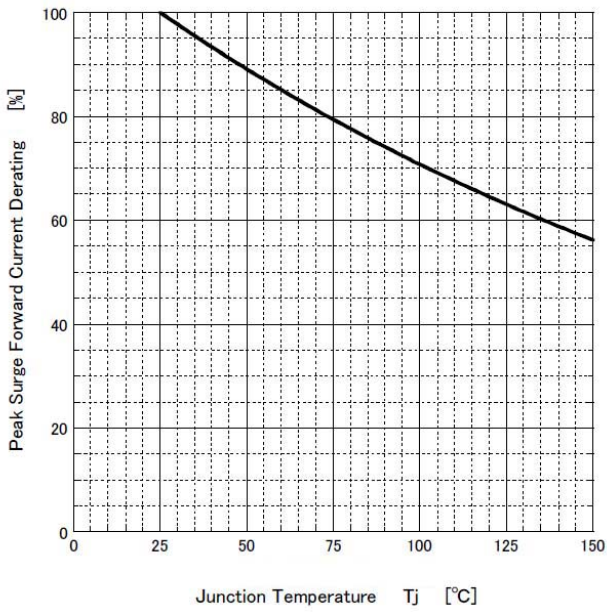
Peak Surge Forward Capability



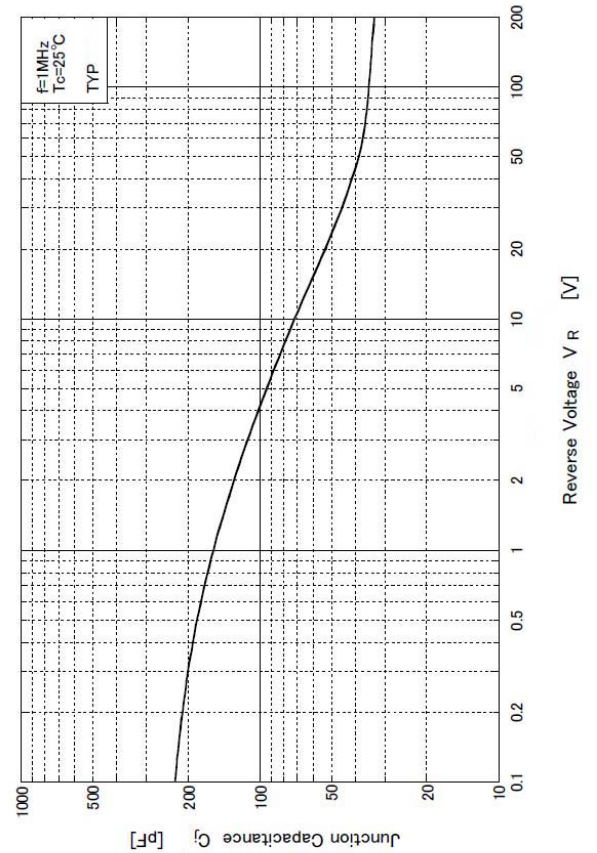
Peak Surge Forward Capability



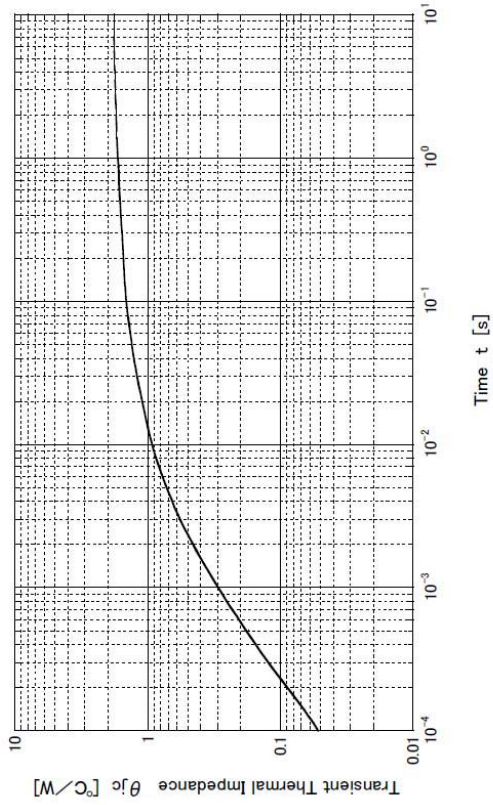
Peak Surge Forward Current Derating vs Junction Temperature



Junction Capacitance

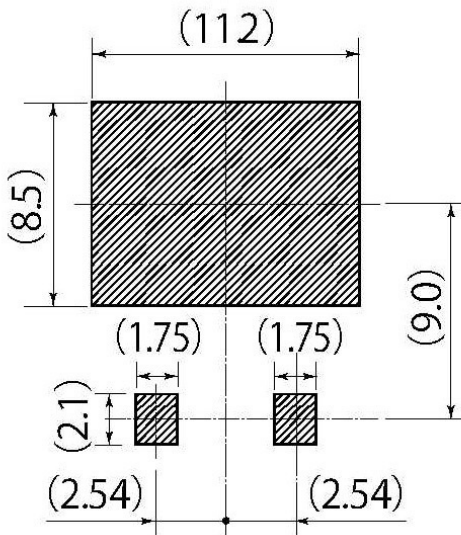
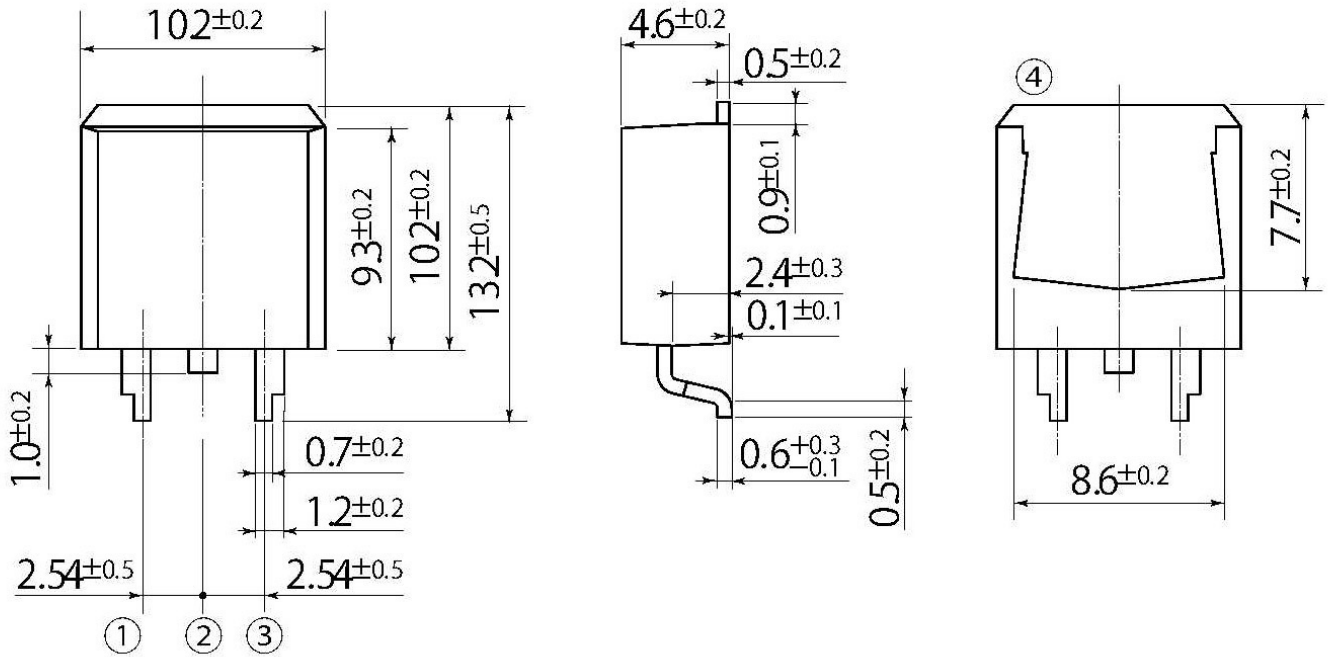


Transient Thermal Impedance



H2

JEDEC Code	-
JEITA Code	SC-83 similar
House Name	FD



Referential Soldering Pad

• Optimize soldering pad to the board design and soldering condition.

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