

# SG20LC20USM

## Fast Recovery Diodes

200V, 20A

### Feature

- High Recovery Speed
- Pb free terminal
- RoHS:Yes

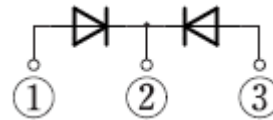
### OUTLINE

Package (House Name): FTO-220G

Package (JEITA Code): SC-91



### Equivalent circuit



### Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		200	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Rating for each diode I <sub>F(AV)</sub> /2, With heatsink, Tc=95°C	20	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	150	A
Dielectric strength	Vdis	Terminals to case backside, AC 1 minute	1.5	kV
Mounting torque	TOR	(Recommended torque : 0.3N·m)	0.5	N·m

※ :See the original Specifications

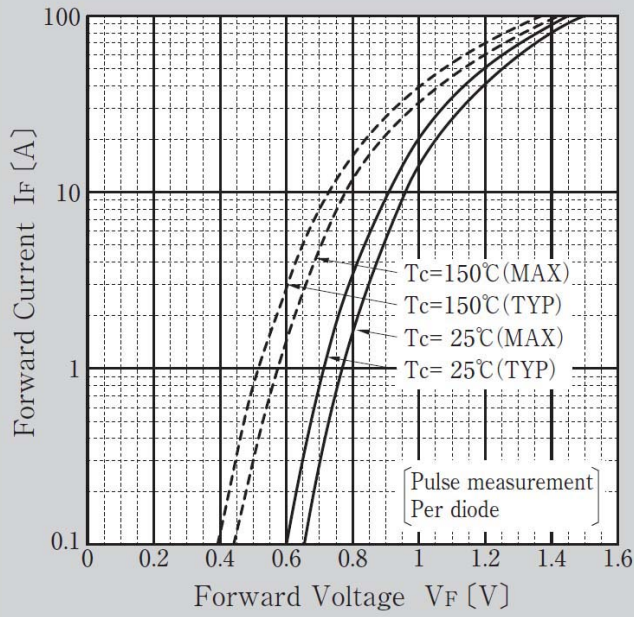
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	IF=10A, Pulse measurement, Per diode			0.96	V
Reverse current	I <sub>R</sub>	VR=200V, Pulse measurement, Per diode			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR, Per Diode			25	ns
Total capacitance	Ct	f=1MHz, VR=10V, Per diode		80		pF
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			2.8	°C/W

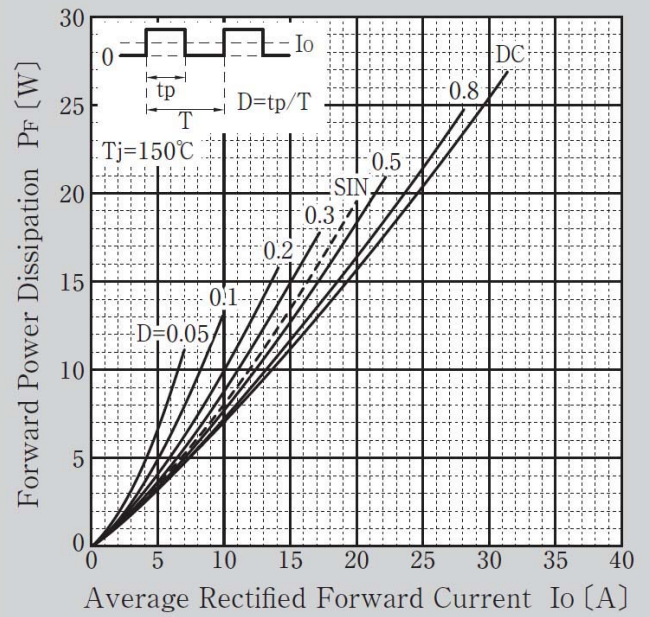
\* :See the original Specifications

# CHARACTERISTIC DIAGRAMS

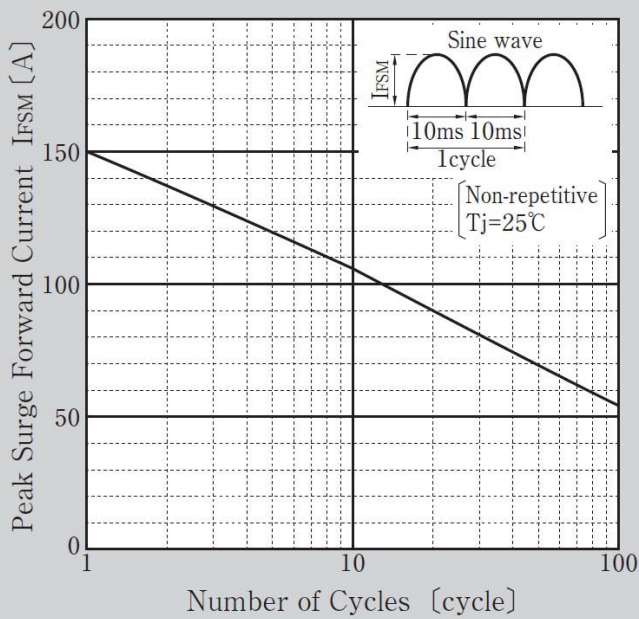
### Forward Voltage



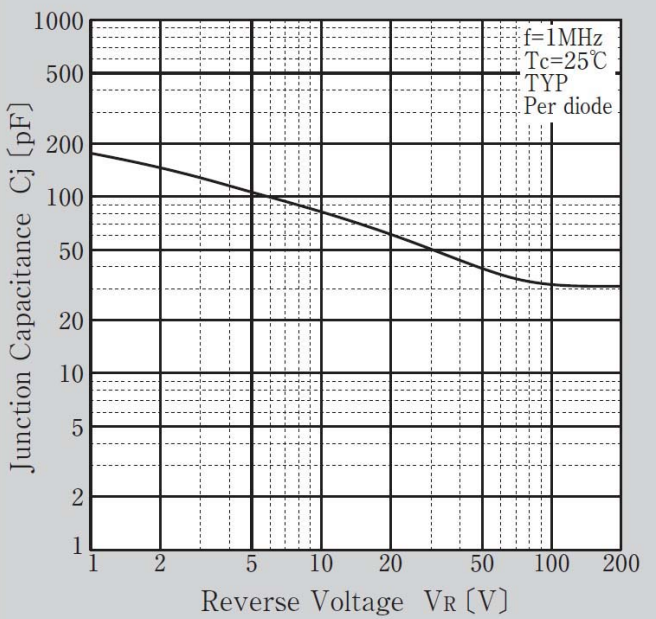
### Forward Power Dissipation



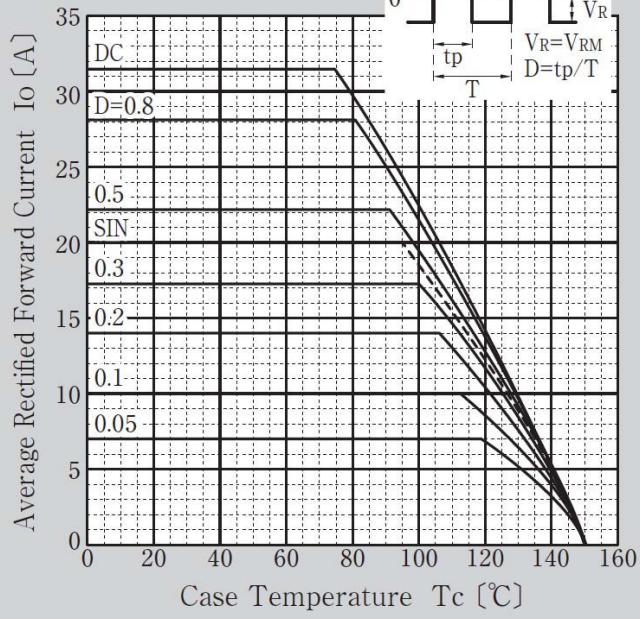
### Peak Surge Forward Current Capability



### Junction Capacitance

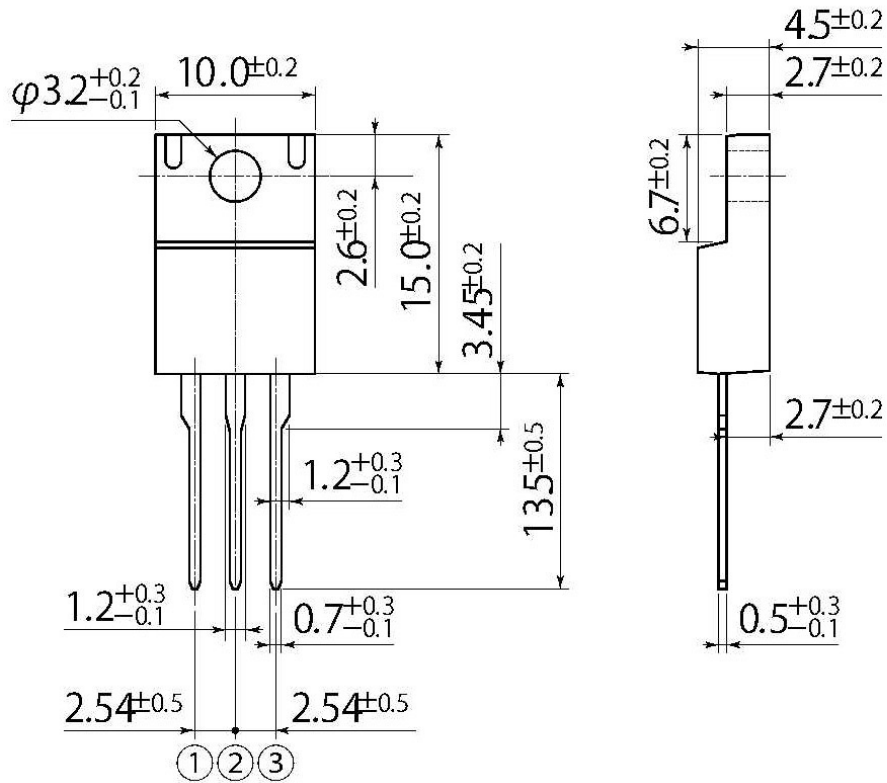


Derating Curve



J9

JEDEC Code	-
JEITA Code	SC-91
House Name	FTO-220G(3pin)



## Notes

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