

# SF20K60M

## Fast Recovery Diodes

### 600V, 20A

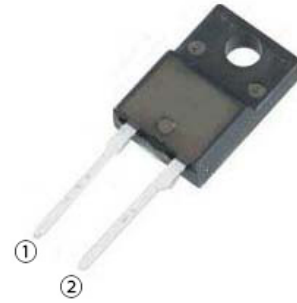
#### Feature

- Full Molded
- High Voltage
- Low Noise
- Dielectric Strength 2kV
- Pb free terminal
- RoHS:Yes

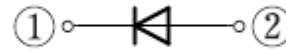
#### OUTLINE

Package (House Name): FTO-220AG

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		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, Tc=96°C	20	A
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	240	A
Surge forward current	I <sub>FSM1</sub>	tp=1ms, Non-repetitive, Tj=25°C	720	A
Dielectric strength	Vdis	Terminals to case, AC 1 minute	2	kV
Mounting torque	TOR	(Recommended torque : 0.3N·m)	0.5	N·m

※ : See the original Specifications

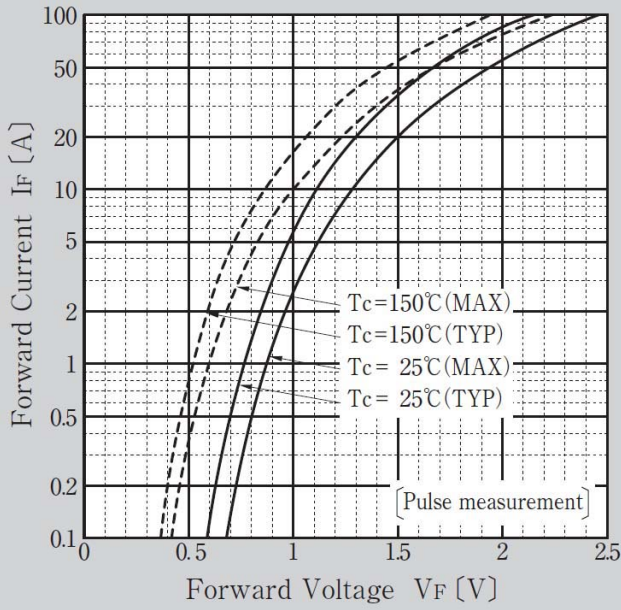
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	IF=20A, Pulse measurement		1.3	1.5	V
Forward voltage	V <sub>F</sub>	IF=2A, Pulse measurement		0.83		V
Reverse current	I <sub>R</sub>	VR=600V, Pulse measurement			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1A, 0.25IR			95	ns
Reverse recovery time	trr	IF=1.0A, VR=30V, di/dt=-50A/μs, 0.25IR			72	ns
Reverse recovery time	trr	IF=1.0A, VR=420V, di/dt=-50A/μs, 0.25IR			84	ns
Total capacitance	Ct	f=1MHz, VR=10V		105		pF
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			1.5	°C/W

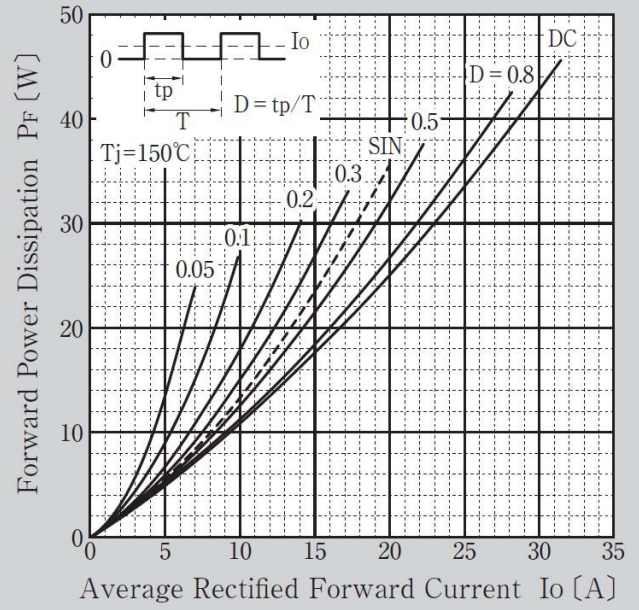
※ : See the original Specifications

# CHARACTERISTIC DIAGRAMS

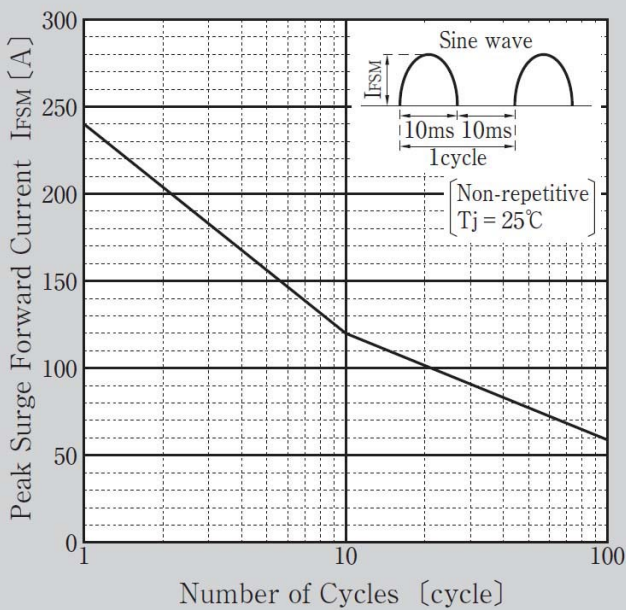
### Forward Voltage



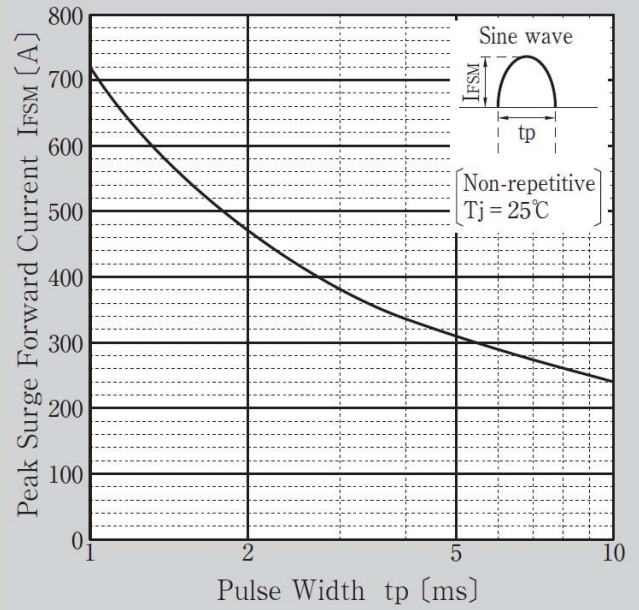
### Forward Power Dissipation

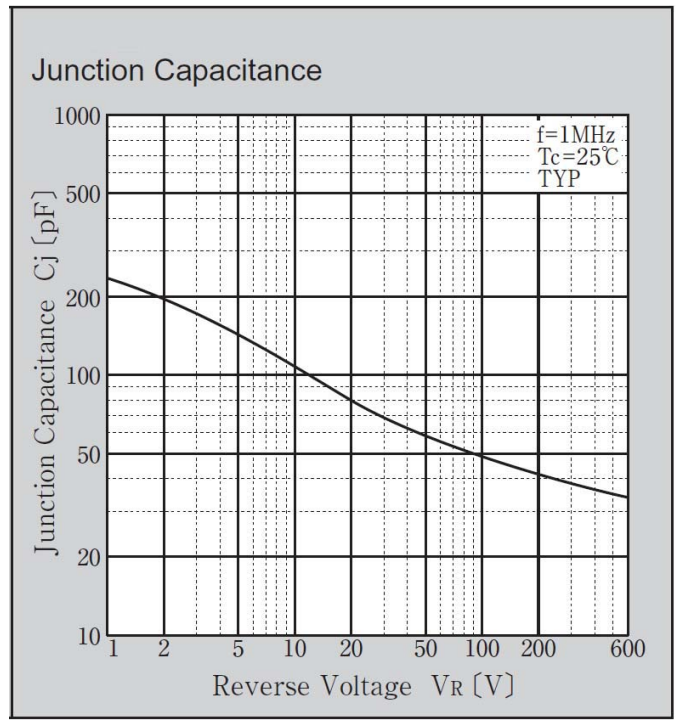
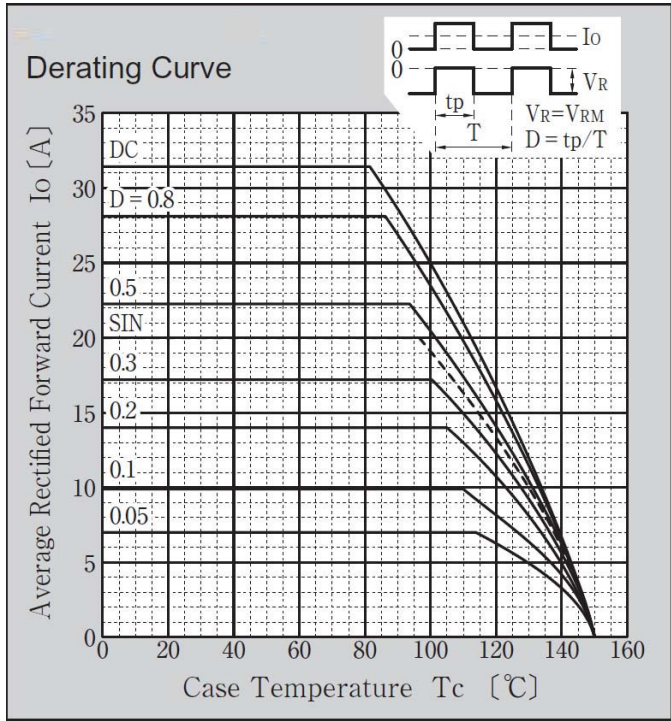


### Peak Surge Forward Current Capability



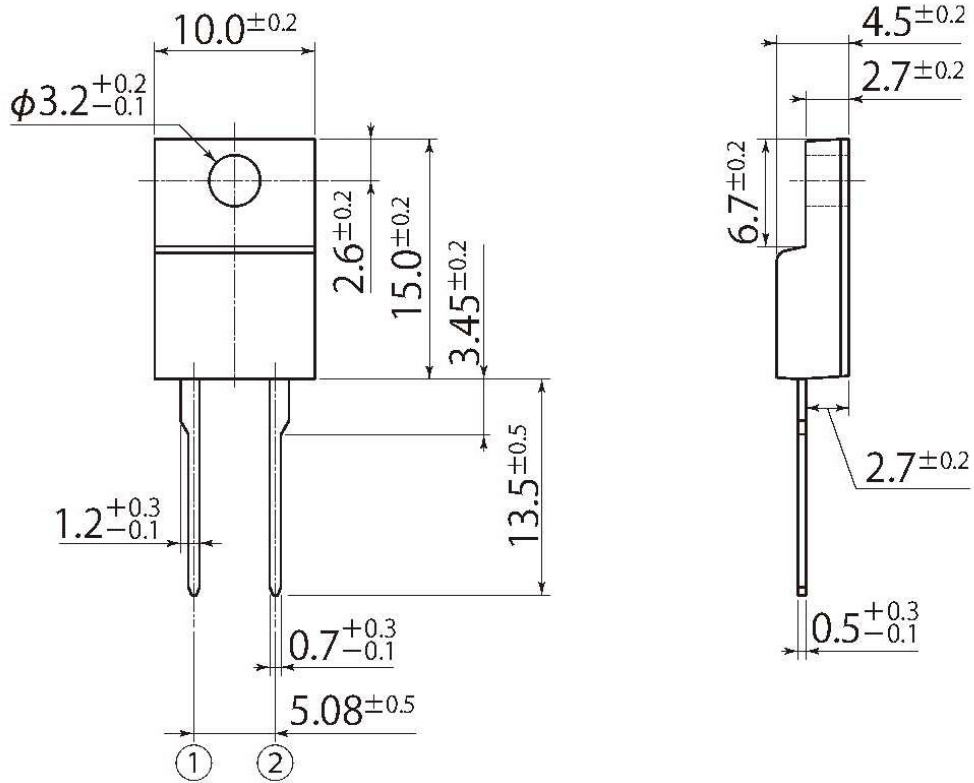
### Peak Surge Forward Current Capability





J3

JEDEC Code	-
JEITA Code	SC-91
House Name	FTO-220AG(2pin)



## Notes

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