

SF20KC60M

Fast Recovery Diodes

600V, 20A

Feature

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

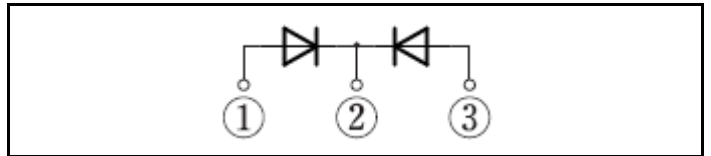
OUTLINE

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	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, Rating for each diode I _{F(AV)} /2, With heatsink, T _c =97°C	20	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, T _j =25°C	180	A
Surge forward current	I _{FSM1}	t _p =1ms, Sine wave, Non-repetitive, Peak value, Per diode, T _j =25°C	569	A
Dielectric strength	V _{dis}	Terminals to case, AC 1 minute	2	kV
Mounting torque	TOR	(Recommended torque : 0.3N·m)	0.5	N·m

※ : See the original Specifications

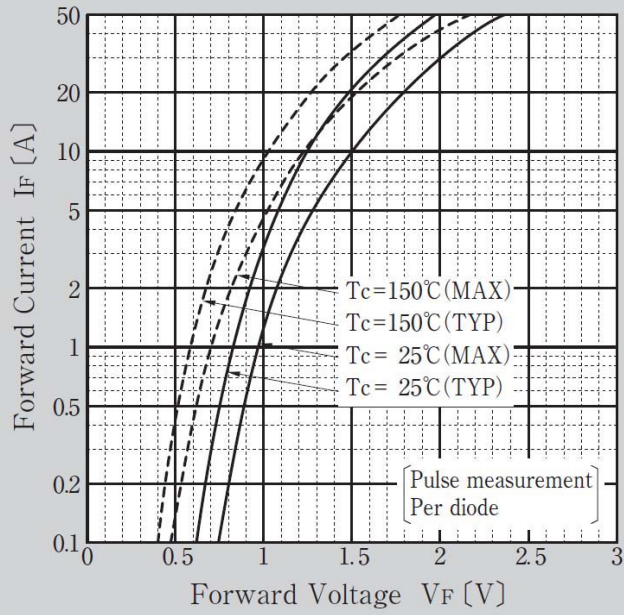
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	IF=10A, Pulse measurement, Per diode		1.25	1.5	V
Forward voltage	V _F	IF=1A, Pulse measurement, Per diode		0.82		V
Reverse current	I _R	VR=600V, Pulse measurement, Per diode			10	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A, 0.25IR, Per Diode			95	ns
Reverse recovery time	trr	IF=1.0A, VR=30V, di/dt=-50A/μs, 0.25IR, Per Diode			72	ns
Reverse recovery time	trr	IF=1.0A, VR=420V, di/dt=-50A/μs, 0.25IR, Per Diode			84	ns
Total capacitance	Ct	f=1MHz, VR=10V, Per diode		53		pF
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			1.5	°C/W

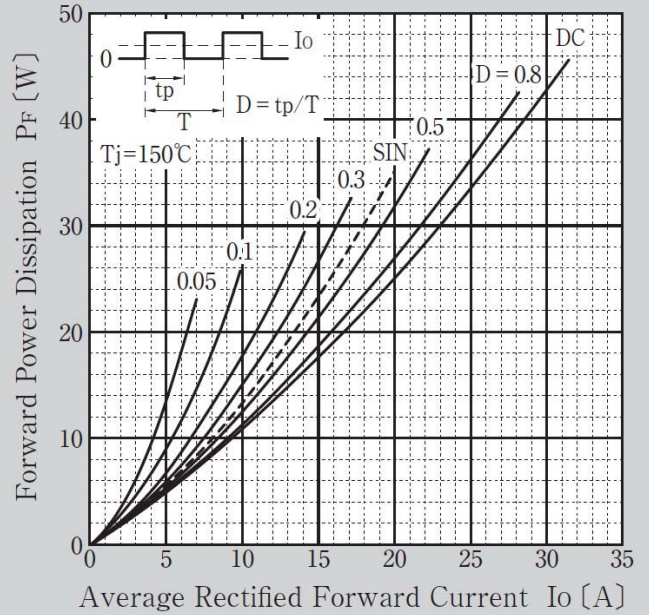
* :See the original Specifications

CHARACTERISTIC DIAGRAMS

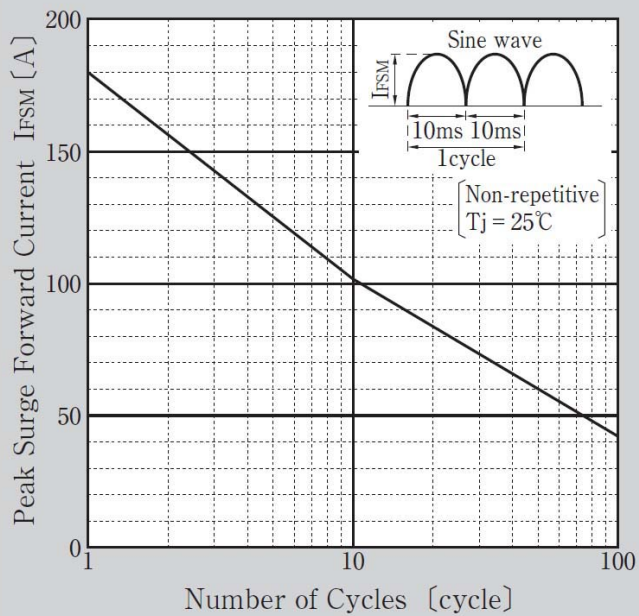
Forward Voltage



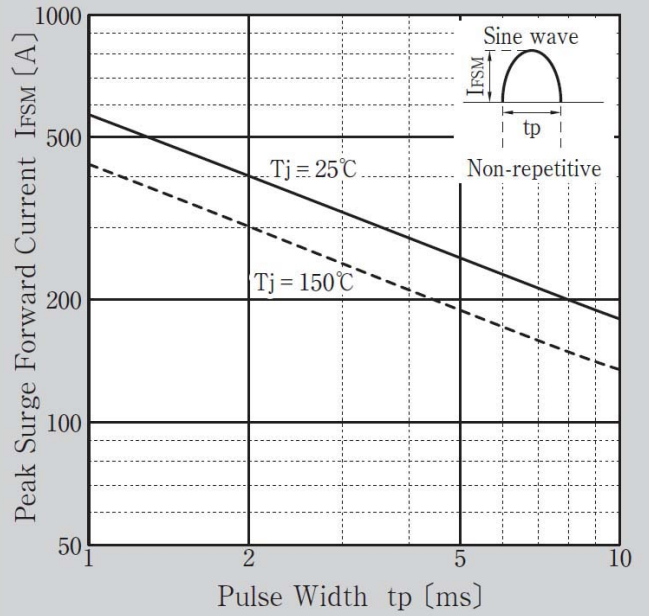
Forward Power Dissipation

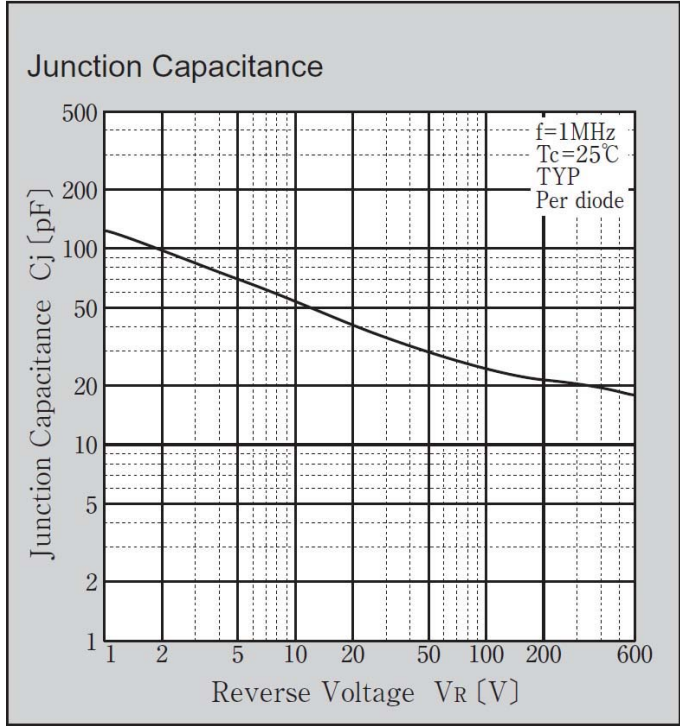
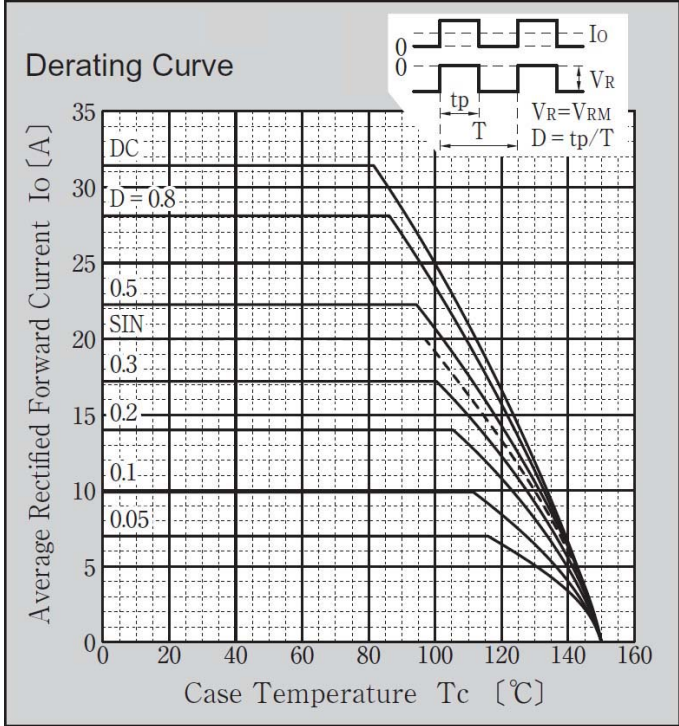


Peak Surge Forward Current Capability



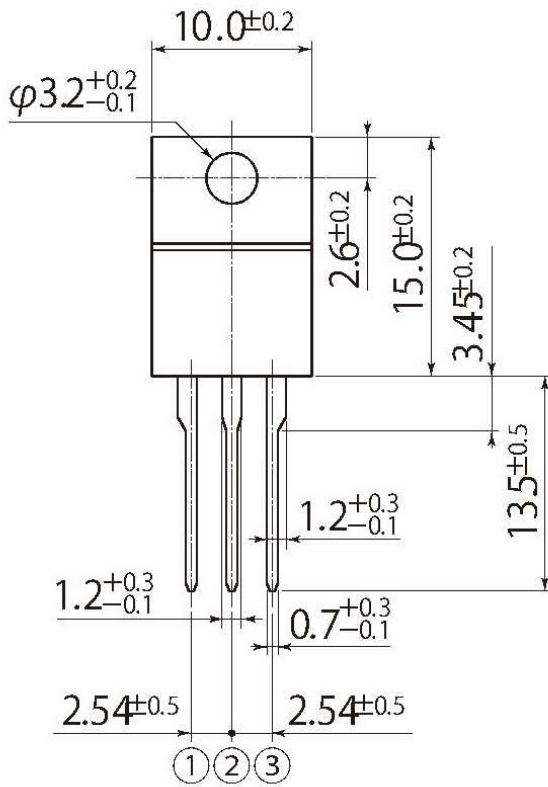
Peak Surge Forward Current Capability





J8

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



Notes

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