SF20KC60M

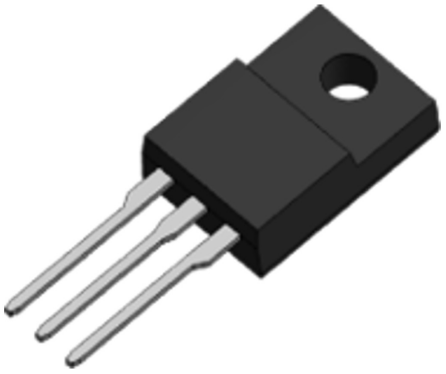
Fast Recovery Diodes
600V, 20A

Feature

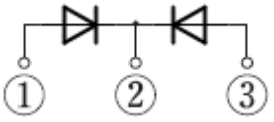
- Full Molded
- High Voltage
- Low Noise
- Dielectric Strength 2kV
- Pb free terminal
- RoHS:Yes

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 temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-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 IF(AV)/2, With heatsink, Tc=97°C	20	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	180	A
Surge forward current	I_{FSM1}	tp=1ms, Sine wave, Non-repetitive, Peak value, Per diode, Tj=25°C	569	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

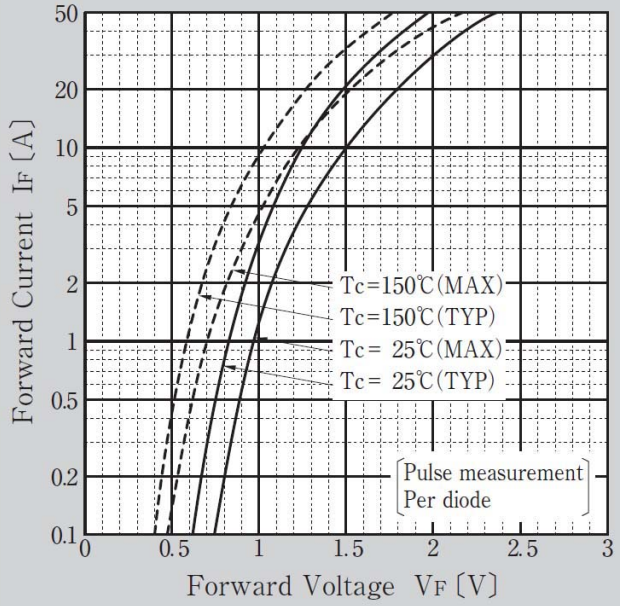
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V_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

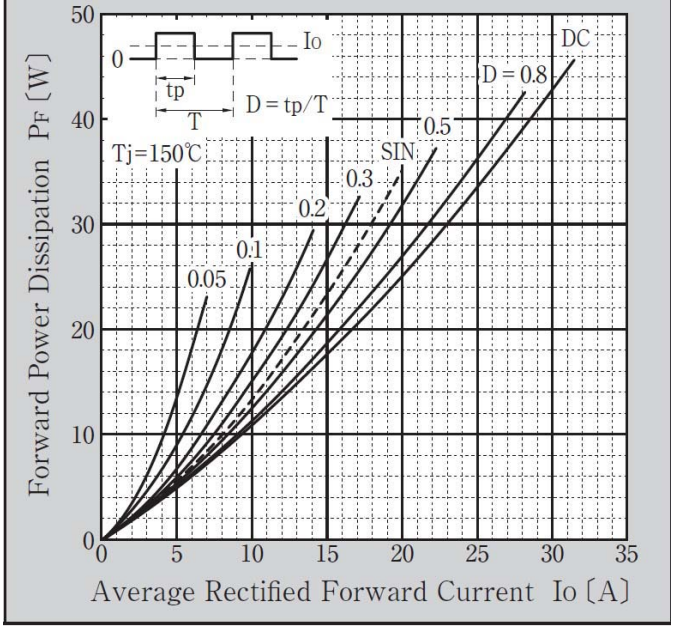
※ ：See the original Specifications

CHARACTERISTIC DIAGRAMS

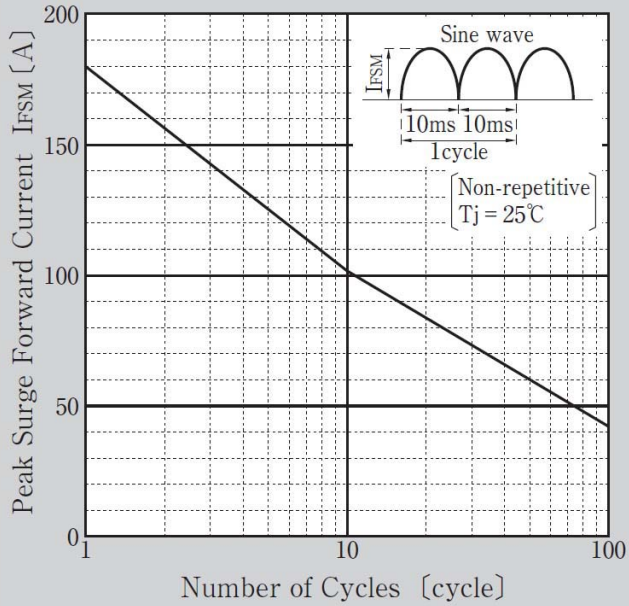
Forward Voltage



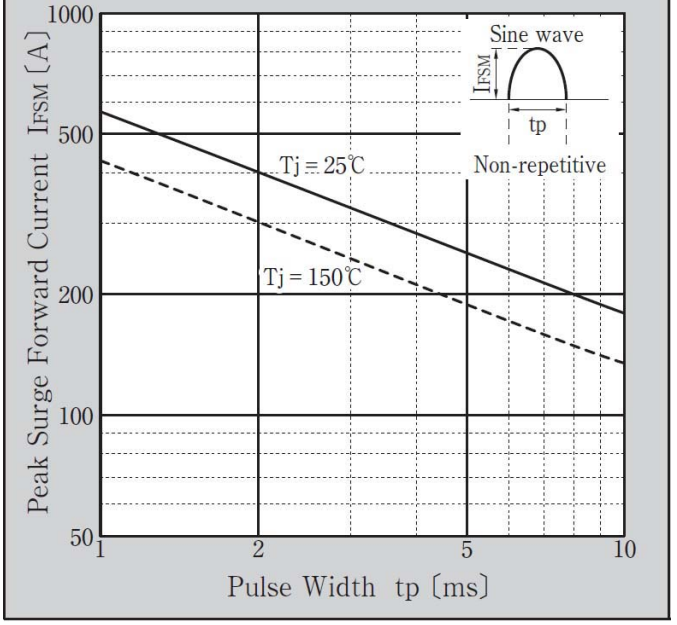
Forward Power Dissipation



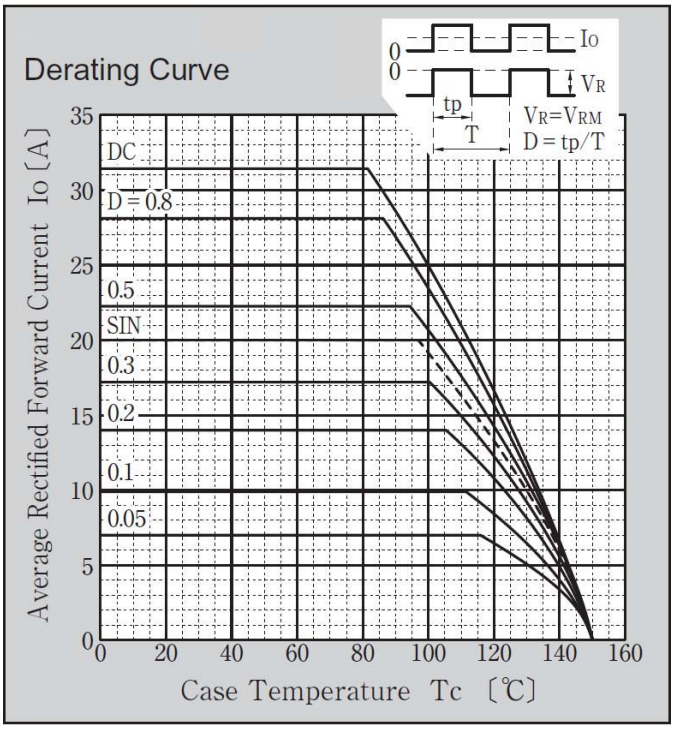
Peak Surge Forward Current Capability



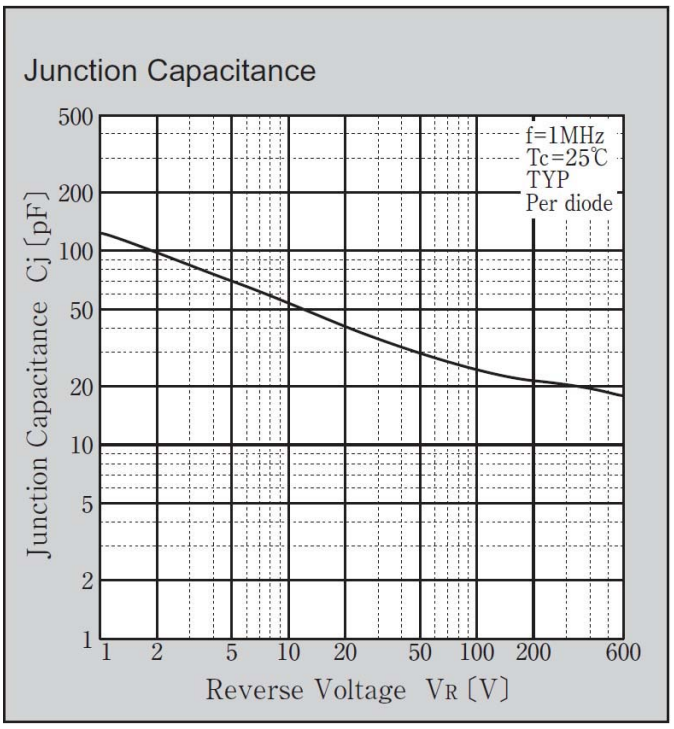
Peak Surge Forward Current Capability



Derating Curve



Junction Capacitance



Outline Dimensions

unit:mm

J8

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

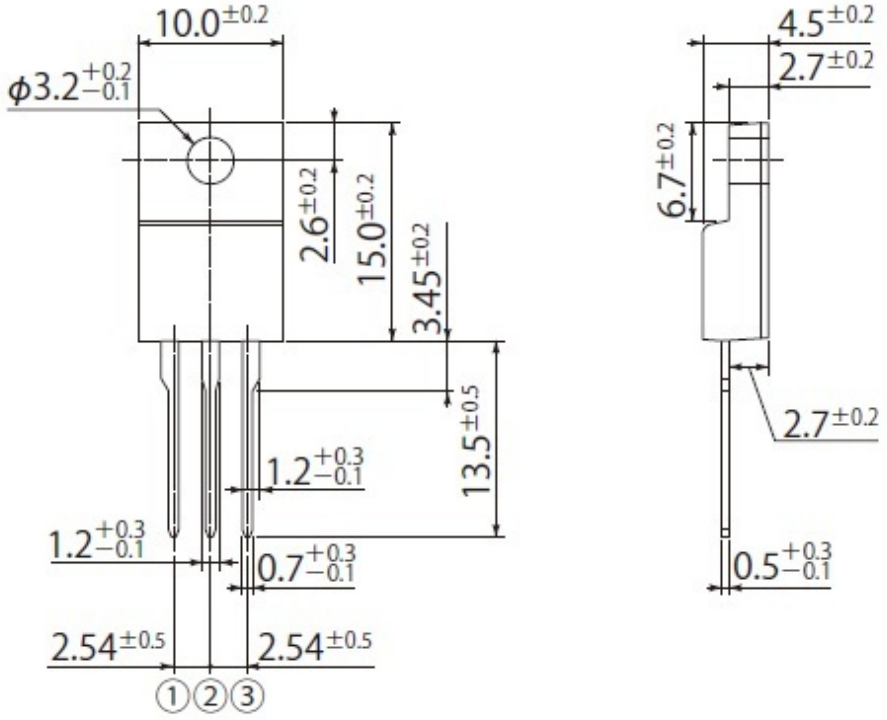
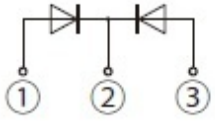


Fig. J8-1



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• If you wish to use any such products, please be sure to refer to the specifications.

Notes

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   【Special applications】
   Transportation equipment (vehicles, ships, etc.), trunk-line communication equipment, traffic signal control systems, anti-disaster/crime systems, safety equipment, medical equipment, etc.
   【Specific applications】
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