

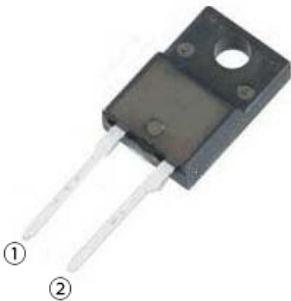
SF8K60USM
Fast Recovery Diodes
600V, 8A

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		150	°C
Repetitive peak reverse voltage	V _{RRM}		600	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Tc=70°C	8	A
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Tc=111°C	5	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C	60	A
Surge forward current	I _{FSM1}	tp=1ms, Sine wave, Non-repetitive, 1 cycle, Peak value, Tj=25°C	145	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

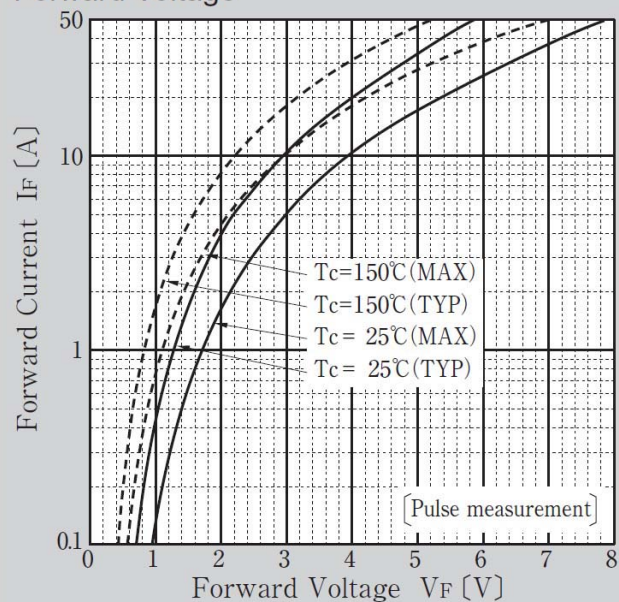
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	IF=8A, Pulse measurement		2.7	3.6	V
Forward voltage	V _F	IF=5A, Pulse measurement		2.2	3	V
Reverse current	I _R	VR=600V, Pulse measurement			50	μA
Reverse recovery time	trr	IF=0.5A, IR=1.0A			25	ns
Total capacitance	Ct	f=1MHz, VR=10V		24		pF
Thermal resistance	Rth(j-c)	Junction to case			2.6	°C/W

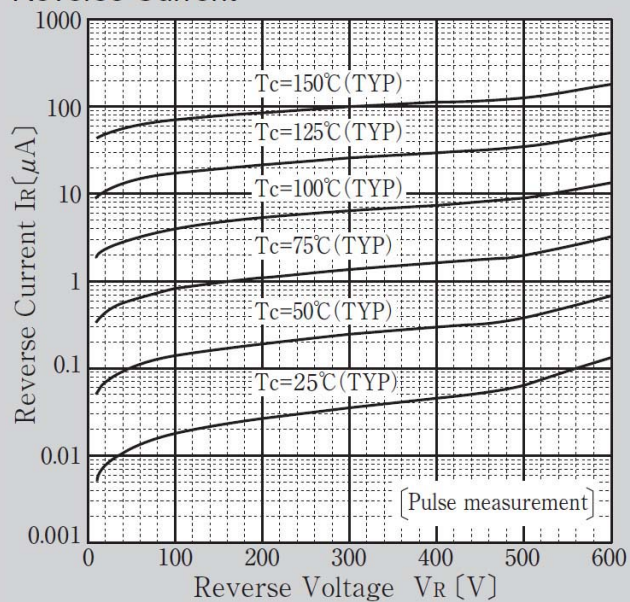
※ :See the original Specifications

CHARACTERISTIC DIAGRAMS

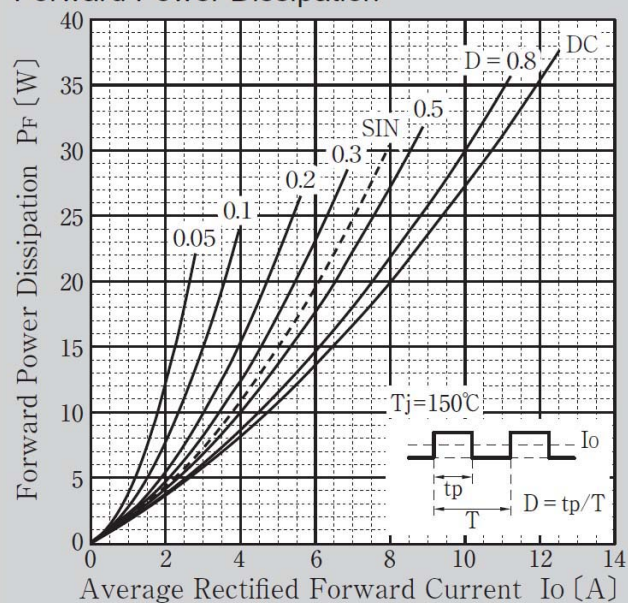
Forward Voltage



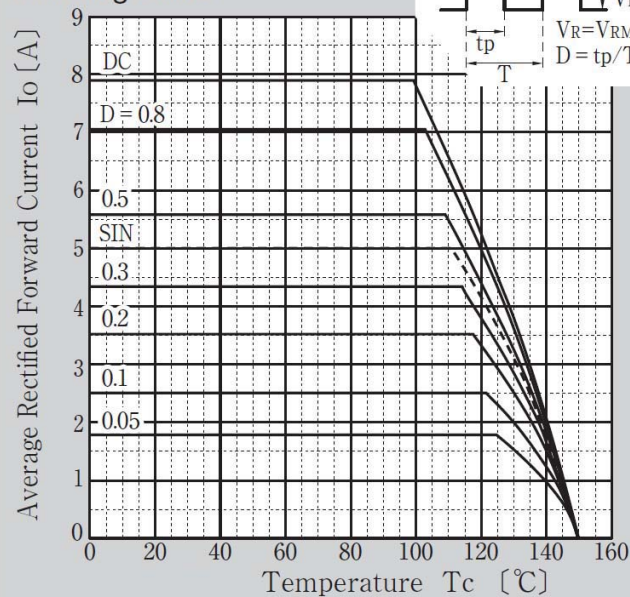
Reverse Current



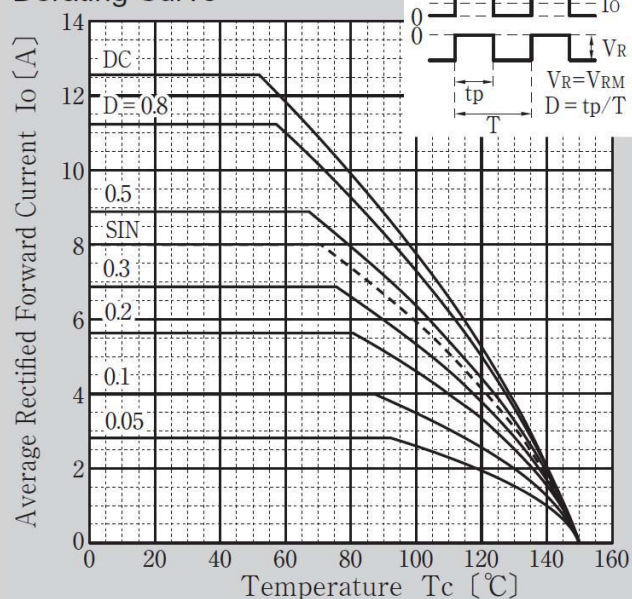
Forward Power Dissipation



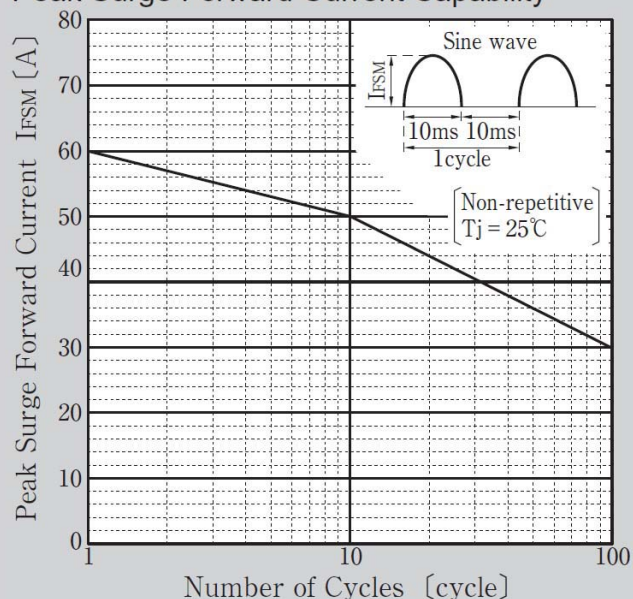
Derating Curve



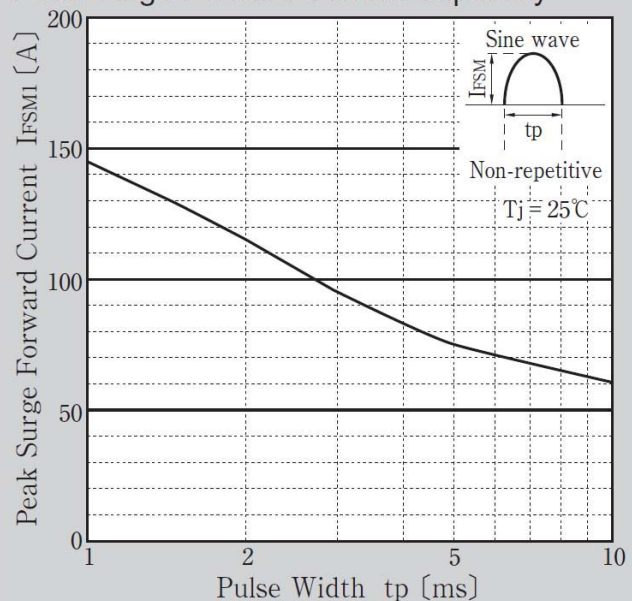
Derating Curve



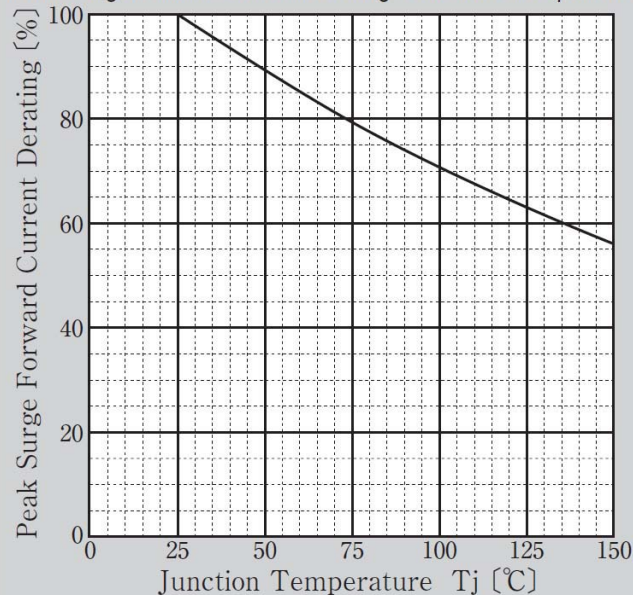
Peak Surge Forward Current Capability

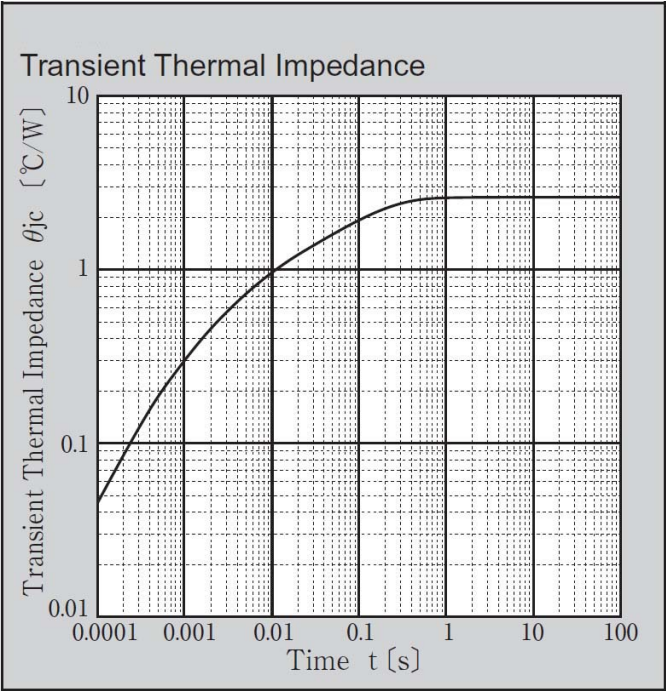
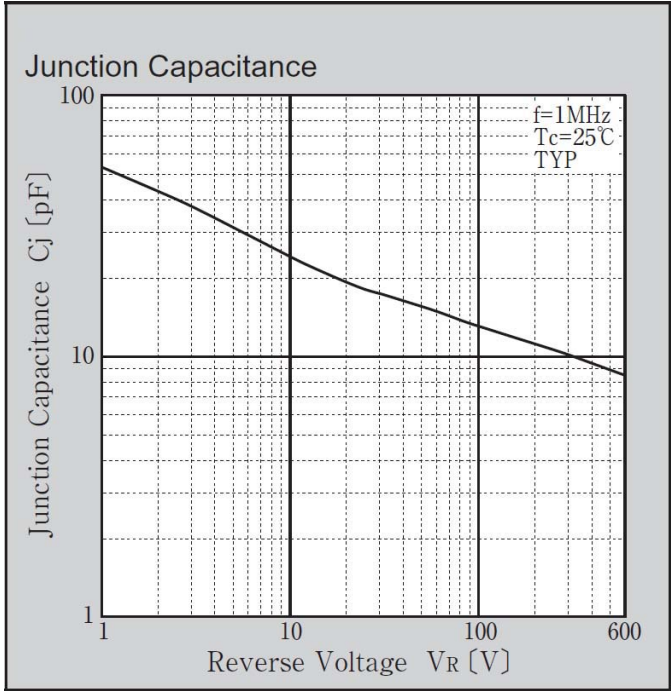


Peak Surge Forward Current Capability



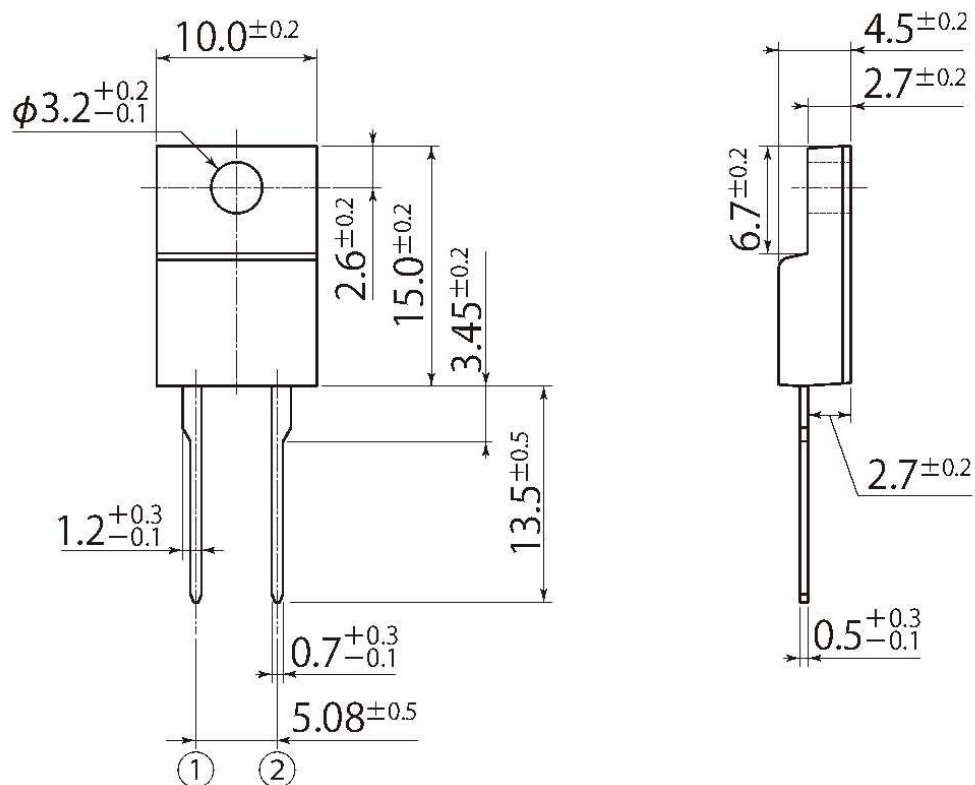
Peak Surge Forward Current Derating vs Junction Temperature





J3

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



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