

SG30SC6M

Schottky Barrier Diodes
60V, 30A

Feature

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

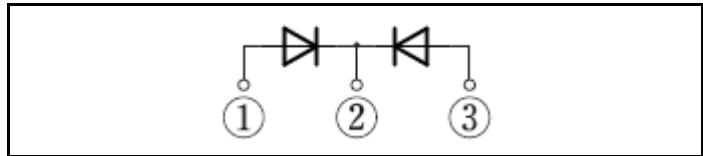
OUTLINE

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	VRRM		60	V
Repetitive peak surge reverse voltage	VRRSM	Pulse width 0.5ms, duty=1/40	65	V
Average forward current	IF(AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, With heatsink, Tc=100°C	30	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	300	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

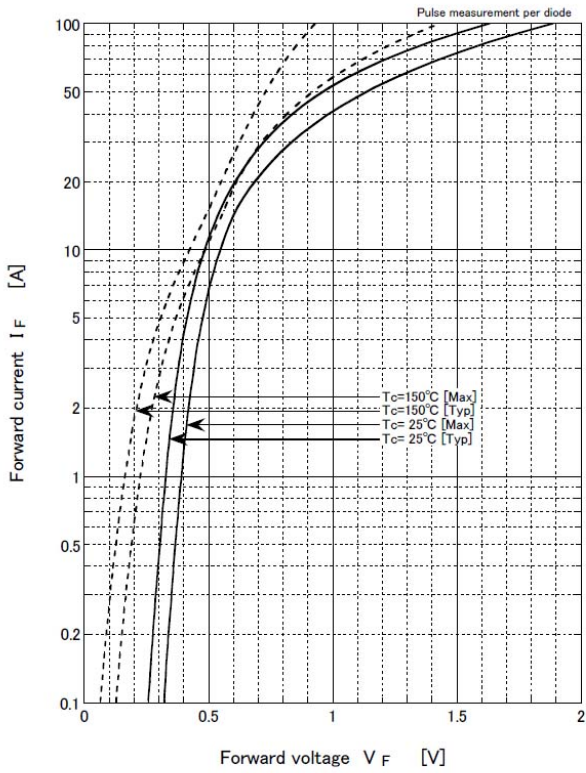
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =15A, Pulse measurement, per diode		0.55	0.61	V
Reverse current	I _R	V _R =60V, Pulse measurement, per diode			1.2	mA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		385		pF
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink			2	°C/W

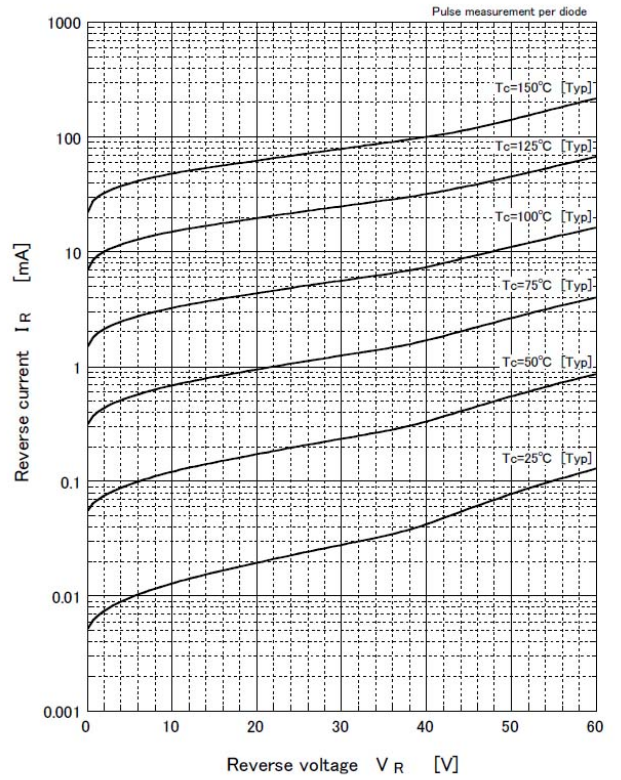
* : See the original Specifications

CHARACTERISTIC DIAGRAMS

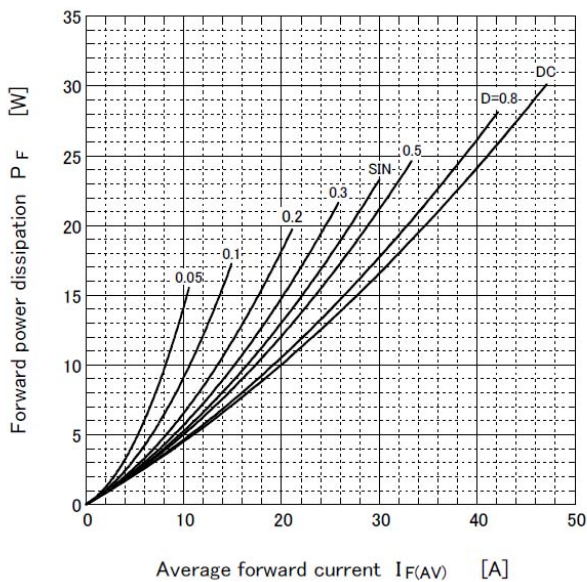
Forward voltage



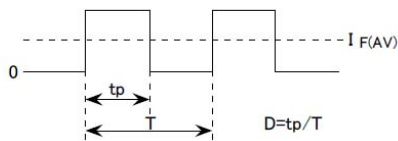
Reverse current



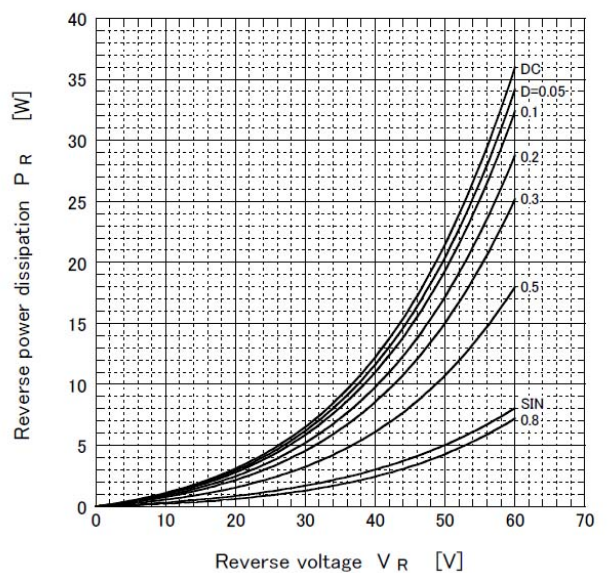
Forward power dissipation



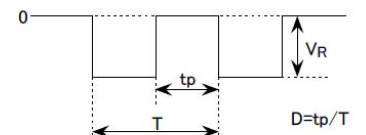
● $T_j=150^\circ\text{C}$



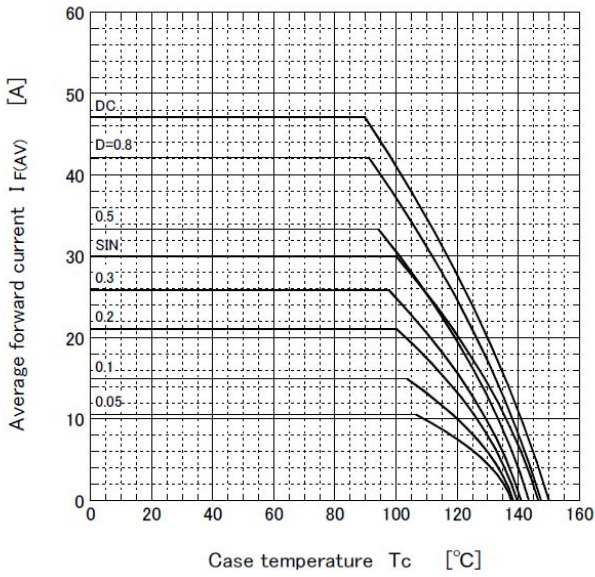
Reverse power dissipation



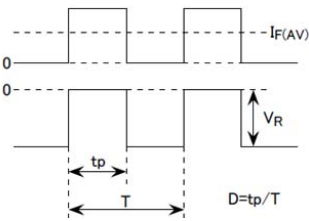
● $T_j=150^\circ\text{C}$



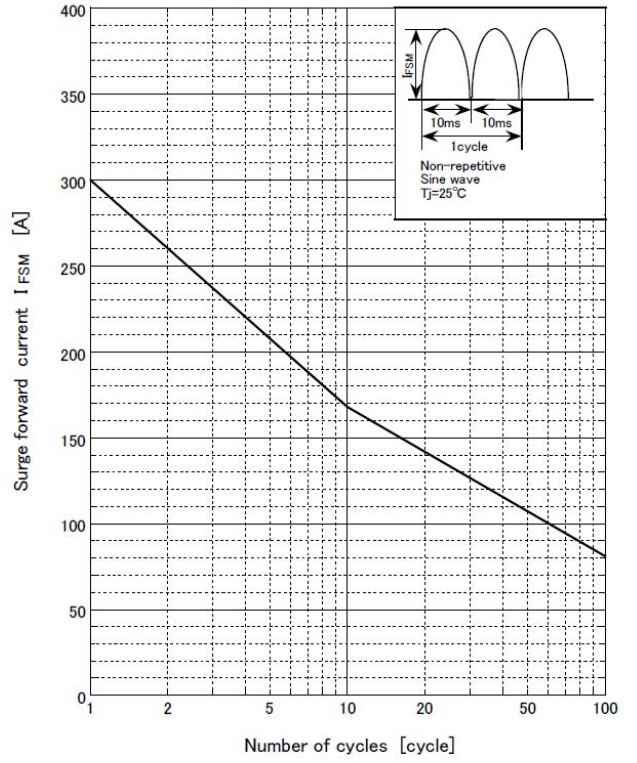
Derating curve



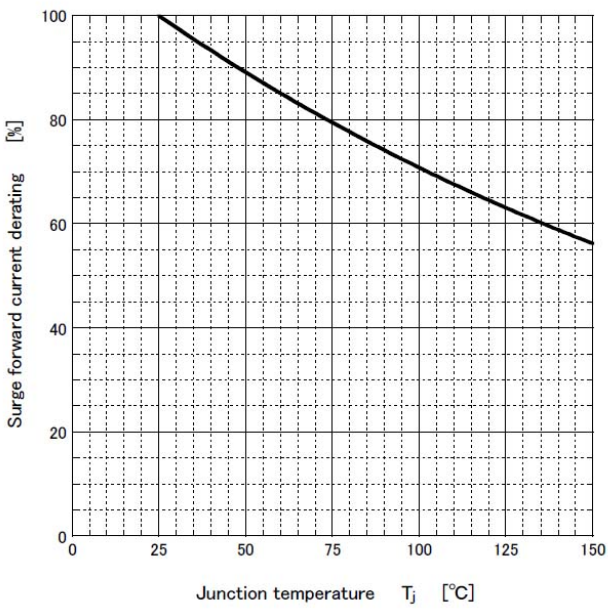
● $V_R = 30V$
R-load
With heatsink



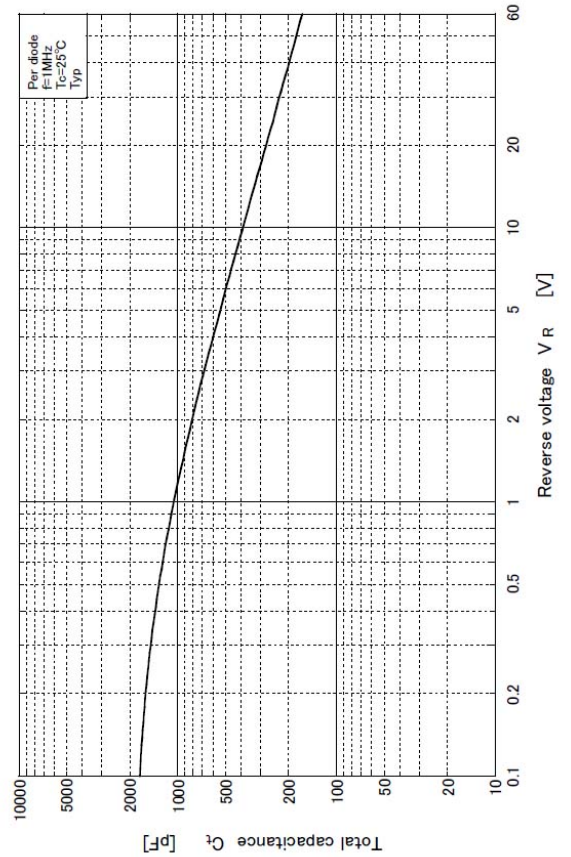
Surge forward current capability



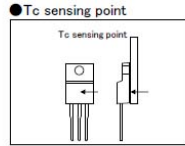
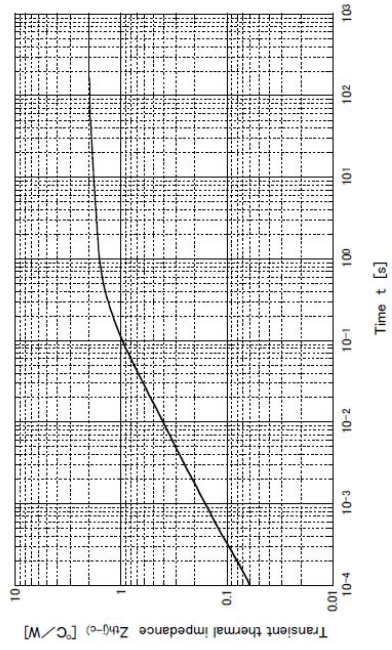
Surge forward current derating vs Junction temperature



Total capacitance

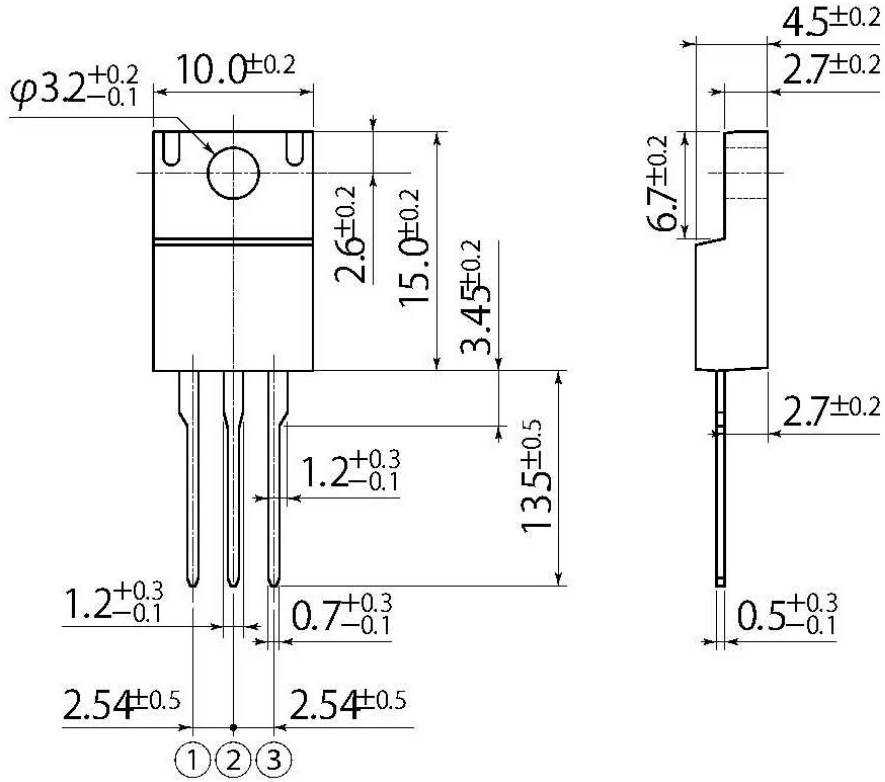


Transient thermal impedance



J9

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



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