

SG30TC10M

Schottky Barrier Diodes
100V, 30A

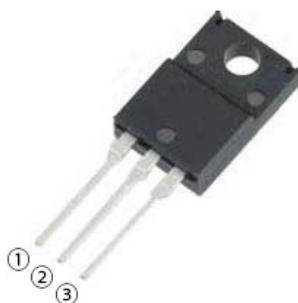
Feature

- High Recovery Speed
- $T_j=175^\circ\text{C}$
- Ultra low I_R
- Pb free terminal
- RoHS:Yes

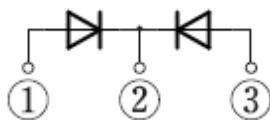
OUTLINE

Package (House Name): FTO-220G

Package (JEITA Code): SC-91



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T_{stg}		-55 to 175	$^\circ\text{C}$
Junction temperature	T_j		-55 to 175	$^\circ\text{C}$
Repetitive peak reverse voltage	V_{RRM}		100	V
Average forward current	$I_F(\text{AV})$	50Hz sine wave, Resistance load, Rating for each diode $I_F(\text{AV})/2$, With heatsink, $T_c=126^\circ\text{C}$	30	A
Surge forward current	I_{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, $T_j=25^\circ\text{C}$	300	A
Dielectric strength	V_{dis}	Terminals to case backside, AC 1 minute.	1.5	kV
Mounting torque	T_{OR}	(Recommended torque : 0.3N·m)	0.5	N·m

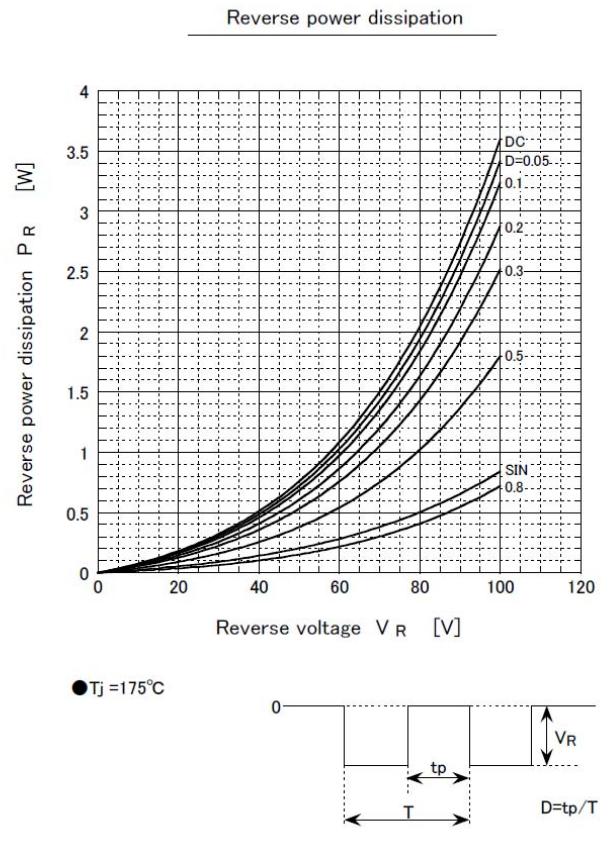
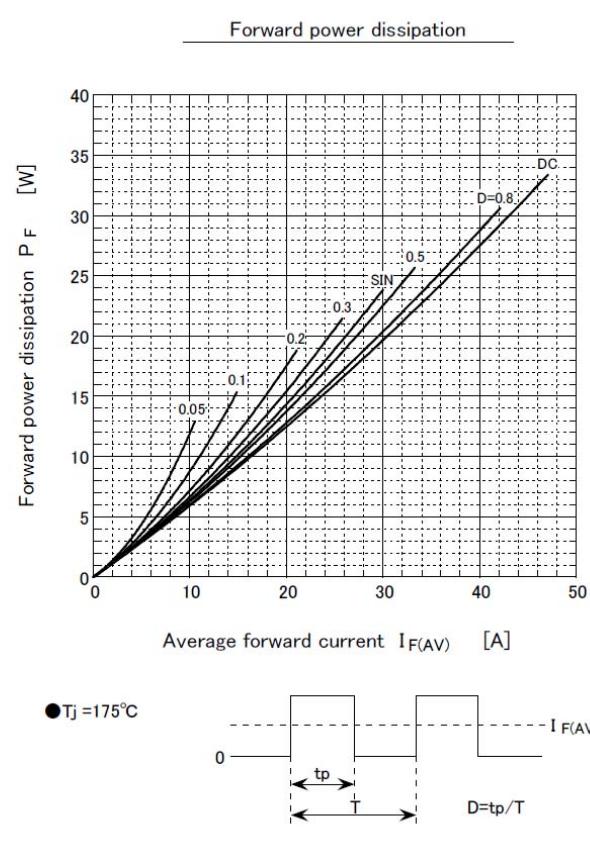
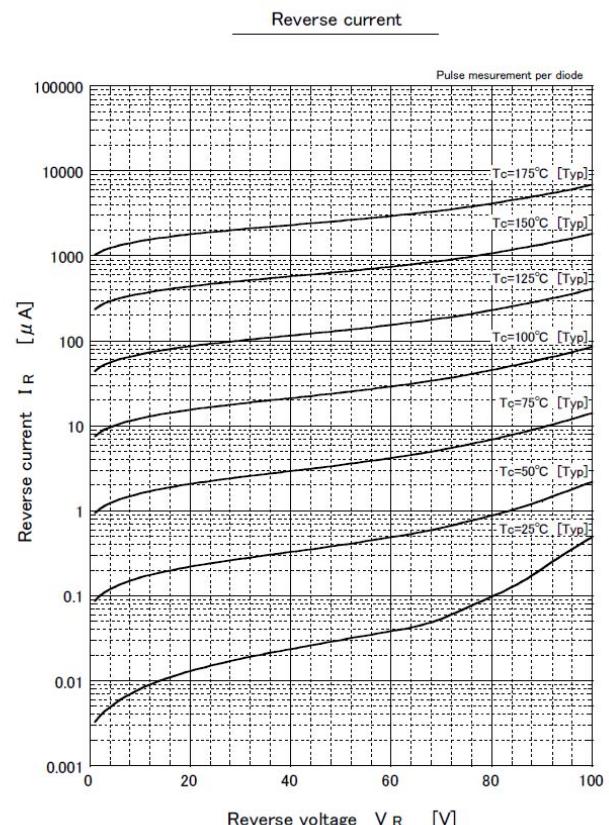
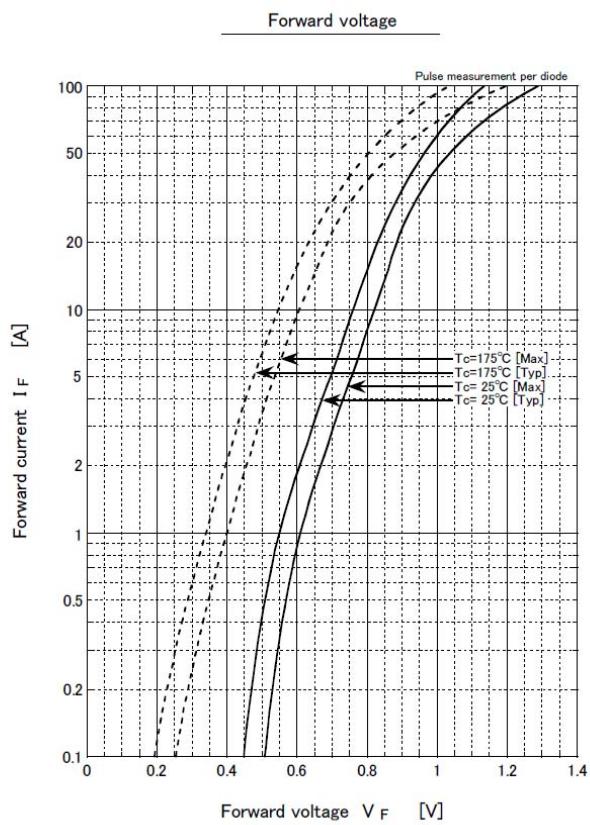
※ :See the original Specifications

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

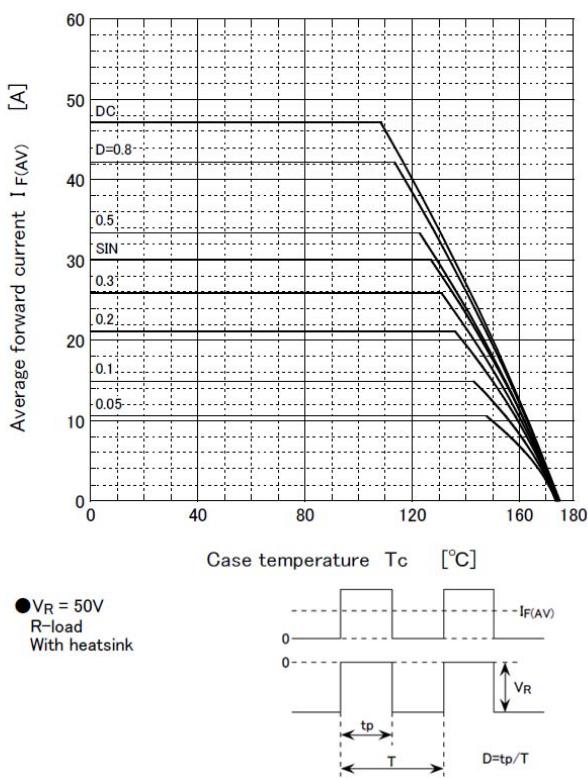
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	IF=15A, Pulse measurement, per diode		0.8	0.86	V
Reverse current	I _R	VR=100V, Pulse measurement, per diode			0.04	mA
Total capacitance	C _t	f=1MHz, VR=10V, per diode		242		pF
Thermal resistance	R _{th(j-c)}	Junction to case, With heatsink			2	°C/W

※ :See the original Specifications

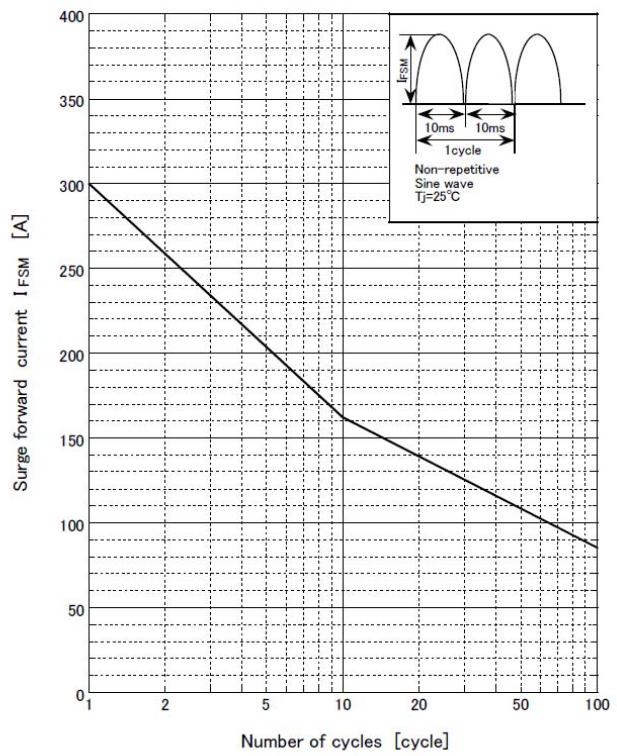
CHARACTERISTIC DIAGRAMS



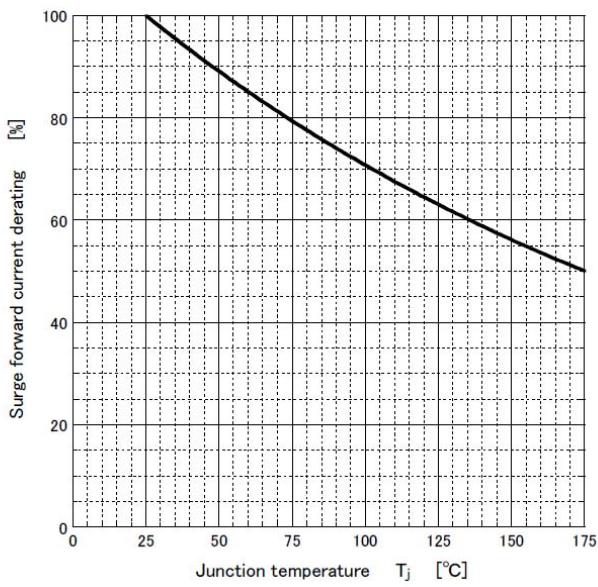
Derating curve



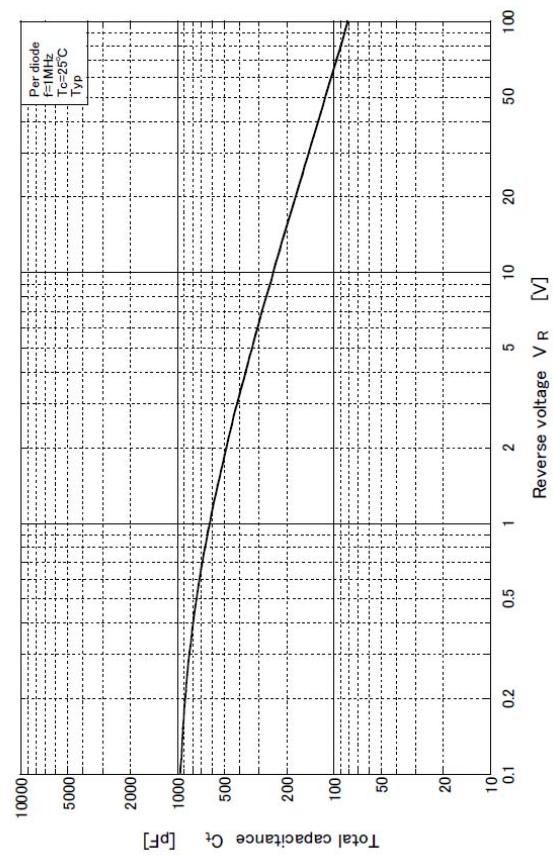
Surge forward current capability

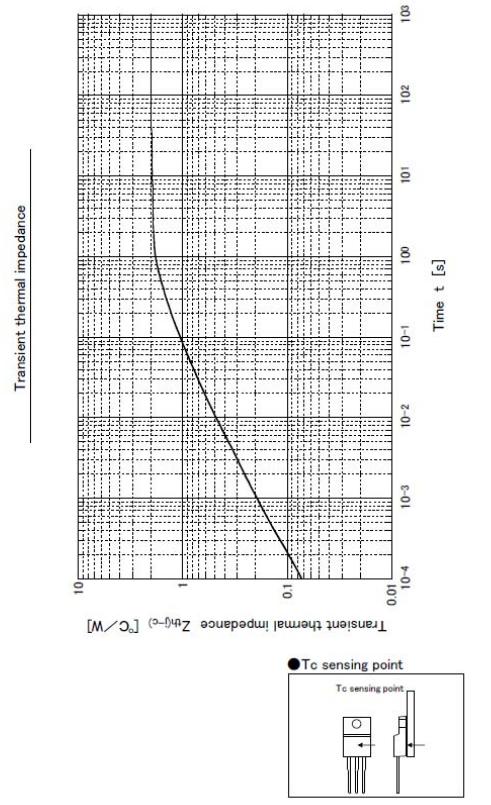


Surge forward current derating
vs Junction temperature



Total capacitance



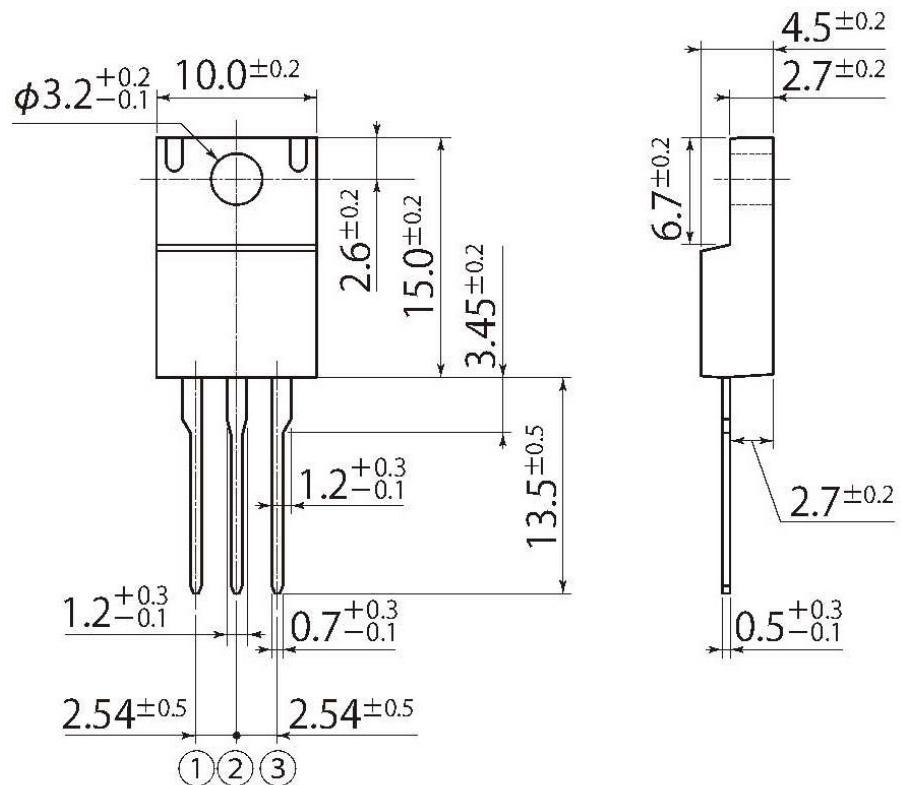


Outline Dimensions

unit:mm

J9

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



Notes

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【Specific applications】

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