

SG30SC4M  
Schottky Barrier Diodes  
40V, 30A

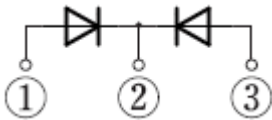
- Feature
- High Recovery Speed
  - Low  $V_F$
  - Pb free terminal
  - RoHS:Yes

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 temperrature	Tstg		-55 to 150	°C
Junction temperature	Tj		-55 to 150	°C
Repetitive peak reverse voltage	VRRM		40	V
Repetitive peak surge reverse voltage	VRRSM	Pulse width 0.5ms, duty=1/40	45	V
Average forward current	IF(AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, With heatsink, Tc=101 °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

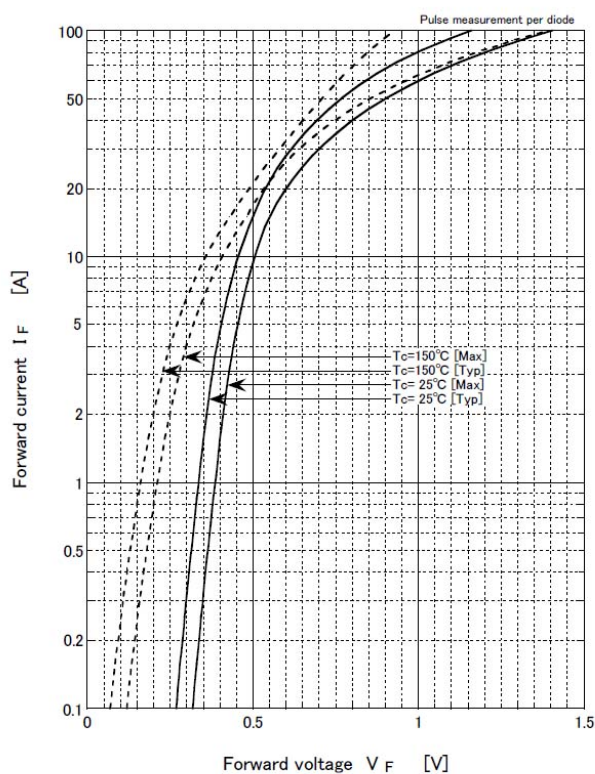
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =15A, Pulse measurement, per diode		0.5	0.55	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =40V, Pulse measurement, per diode			1.5	mA
Total capacitance	C <sub>t</sub>	f=1MHz, V <sub>R</sub> =10V, per diode		415		pF
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case, With heatsink			2.2	°C/W

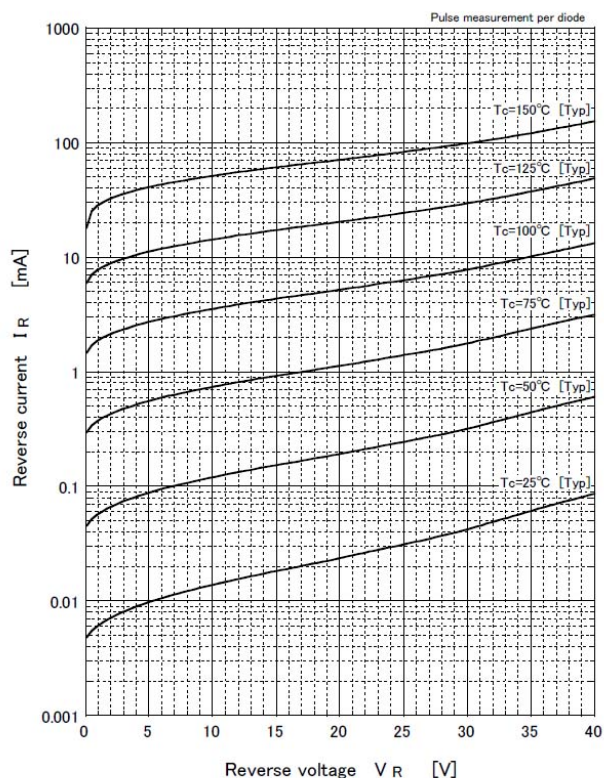
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS

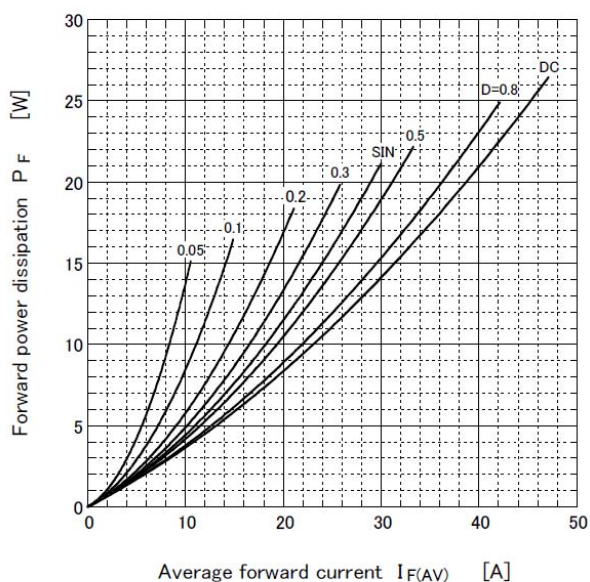
Forward voltage



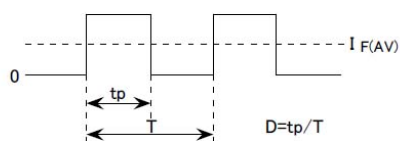
Reverse current



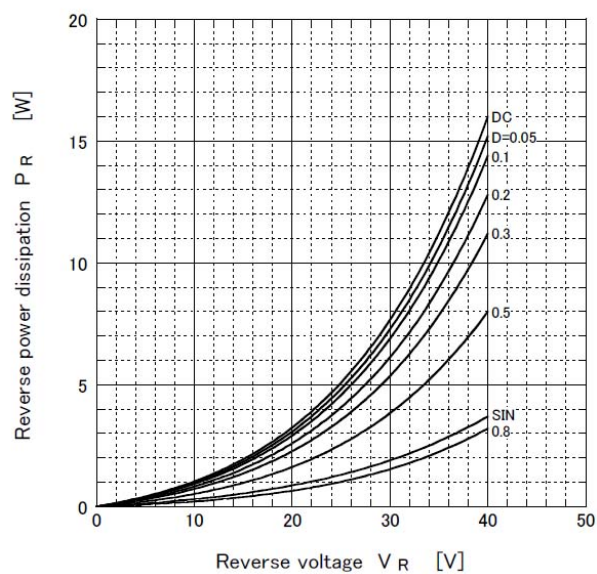
Forward power dissipation



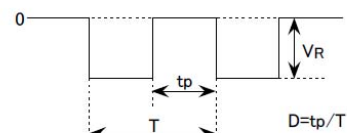
●  $T_J=150^\circ\text{C}$



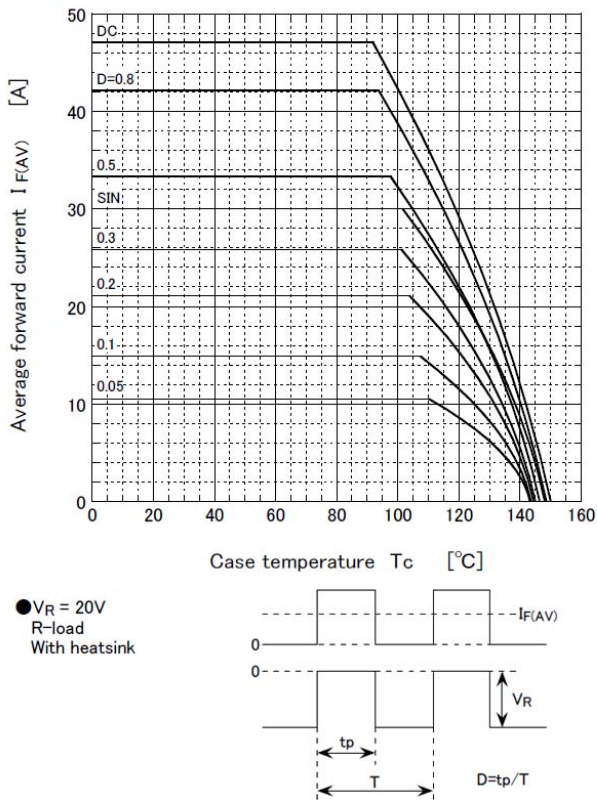
Reverse power dissipation



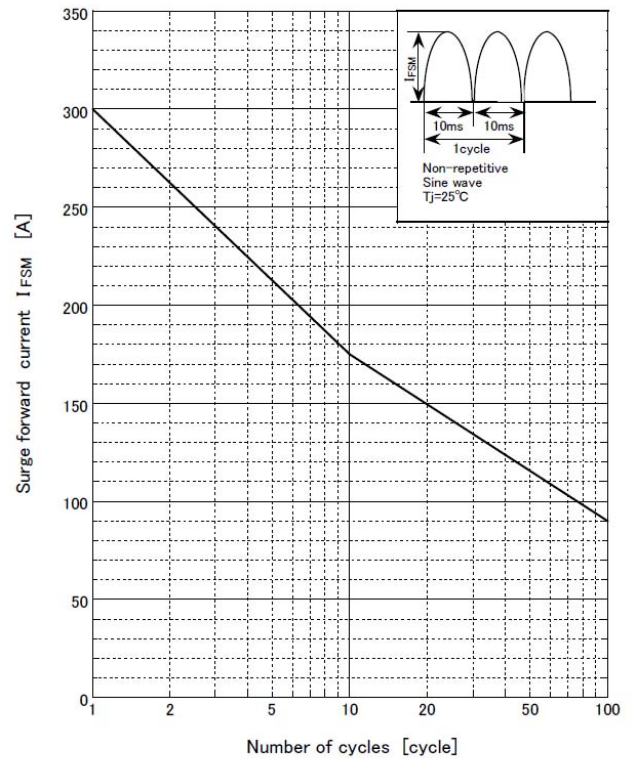
●  $T_J=150^\circ\text{C}$



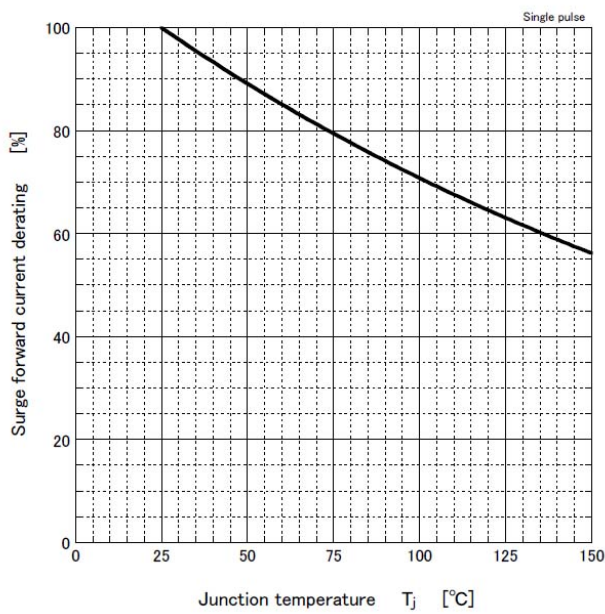
Derating curve



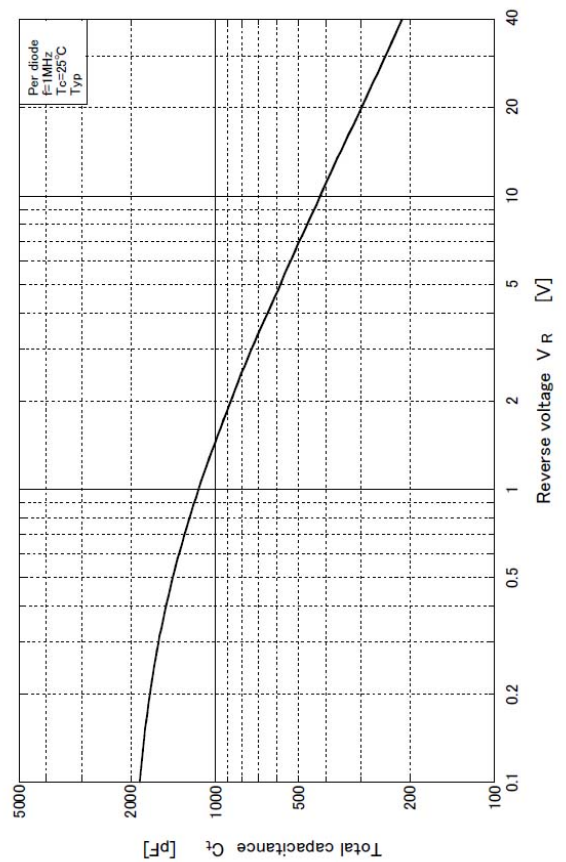
Surge forward current capability



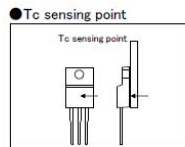
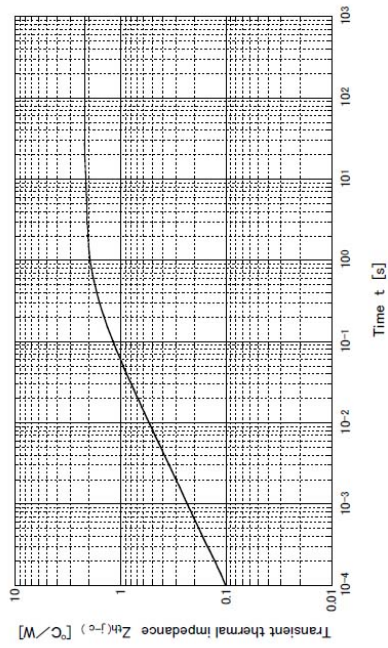
Surge forward current derating vs Junction temperature



Total capacitance



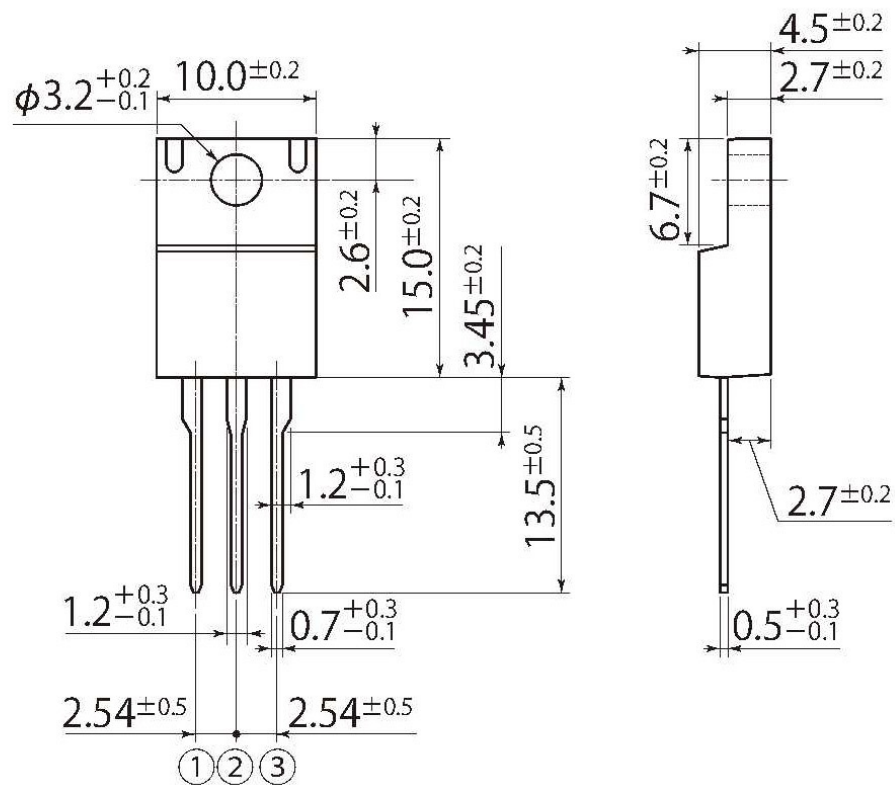
Transient thermal impedance





J9

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



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