

SG20SC4M
Schottky Barrier Diodes
40V, 20A

Feature

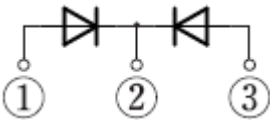
- High Recovery Speed
- Low V_F
- Pb free terminal
- RoHS:Yes

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		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, Tc=115°C	20	A
Surge forward current	IFSM	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	200	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

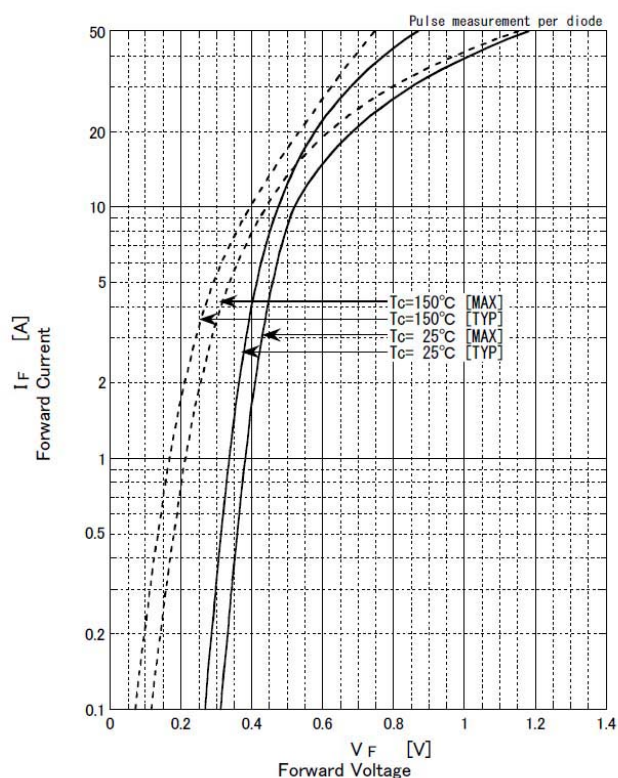
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =10A, Pulse measurement, per diode		0.47	0.52	V
Reverse current	I _R	V _R =40V, Pulse measurement, per diode			1.1	mA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		315		pF
Thermal resistance	R _{th(j-c)}	Junction to case			2.4	°C/W

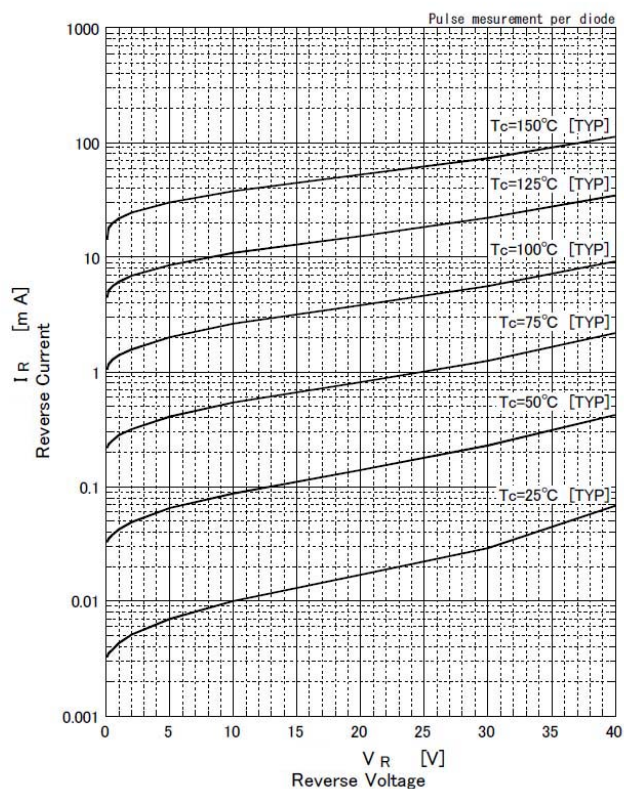
※ : See the original Specifications

CHARACTERISTIC DIAGRAMS

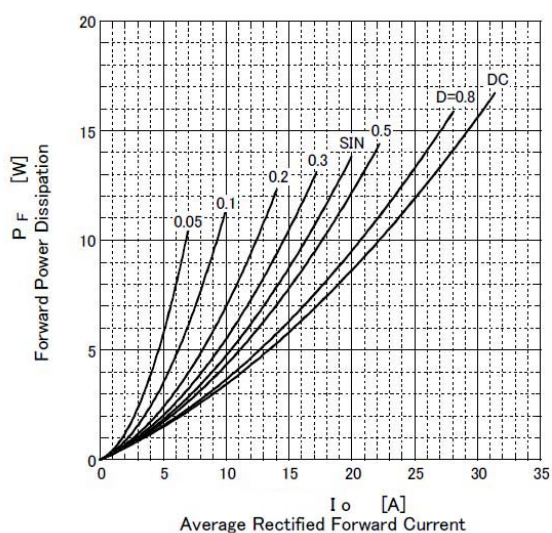
SG20SC4M Forward Voltage



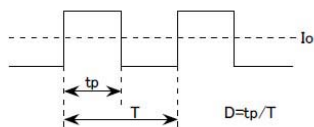
SG20SC4M Reverse Current



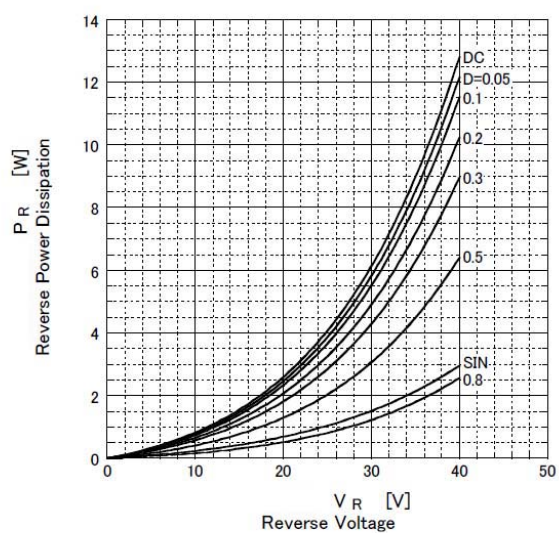
SG20SC4M Forward Power Dissipation



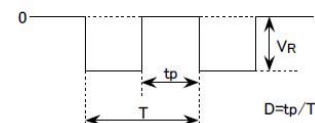
● $T_j = 150^\circ\text{C}$



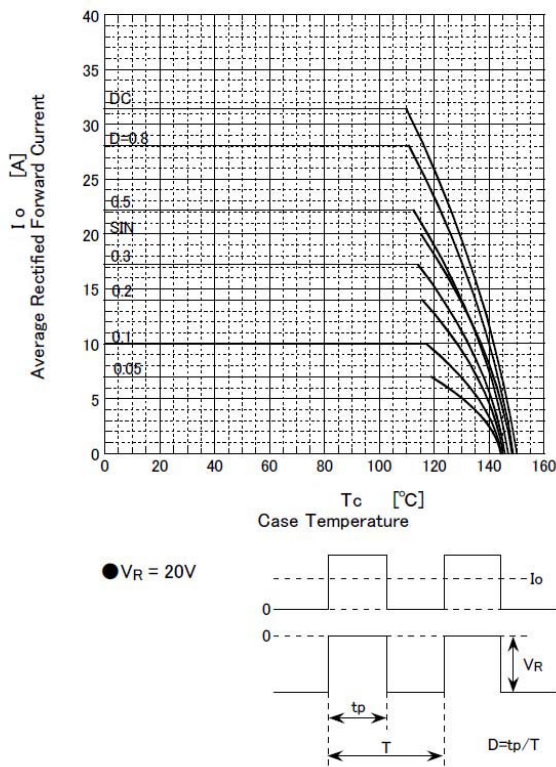
SG20SC4M Reverse Power Dissipation



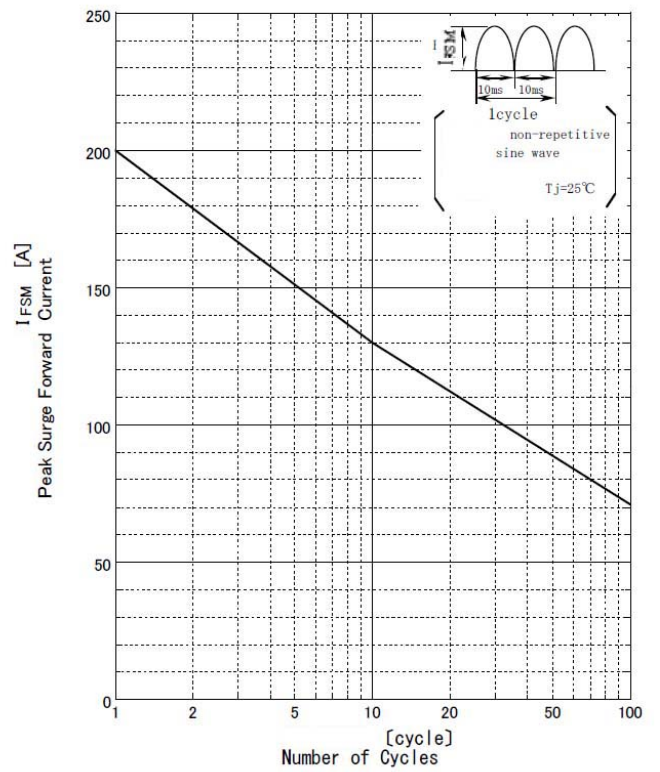
● $T_j = 150^\circ\text{C}$



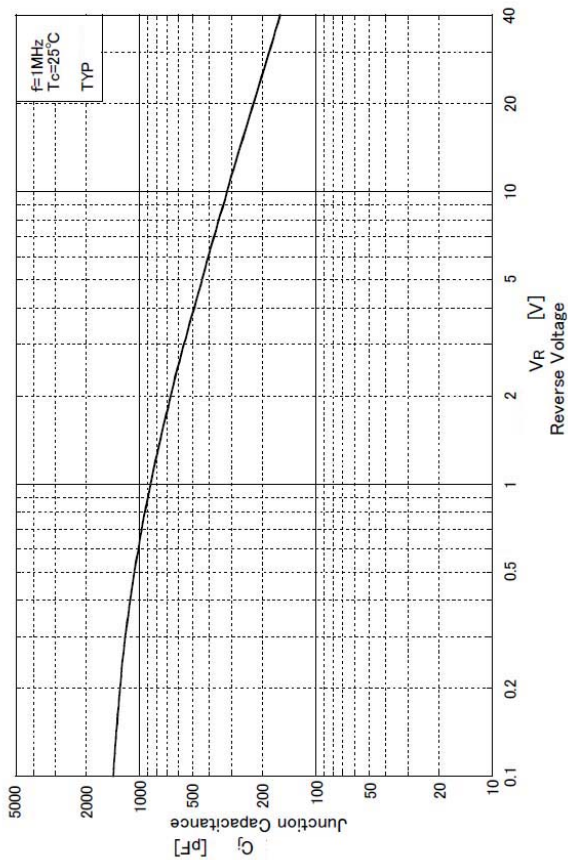
SG20SC4M Derating Curve



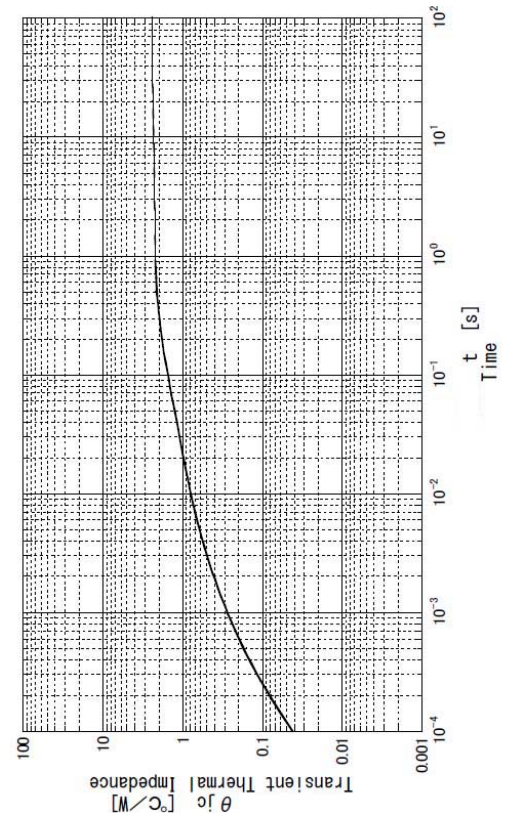
SG20SC4M Peak Surge Forward Capability



SG20SC4M Junction Capacitance

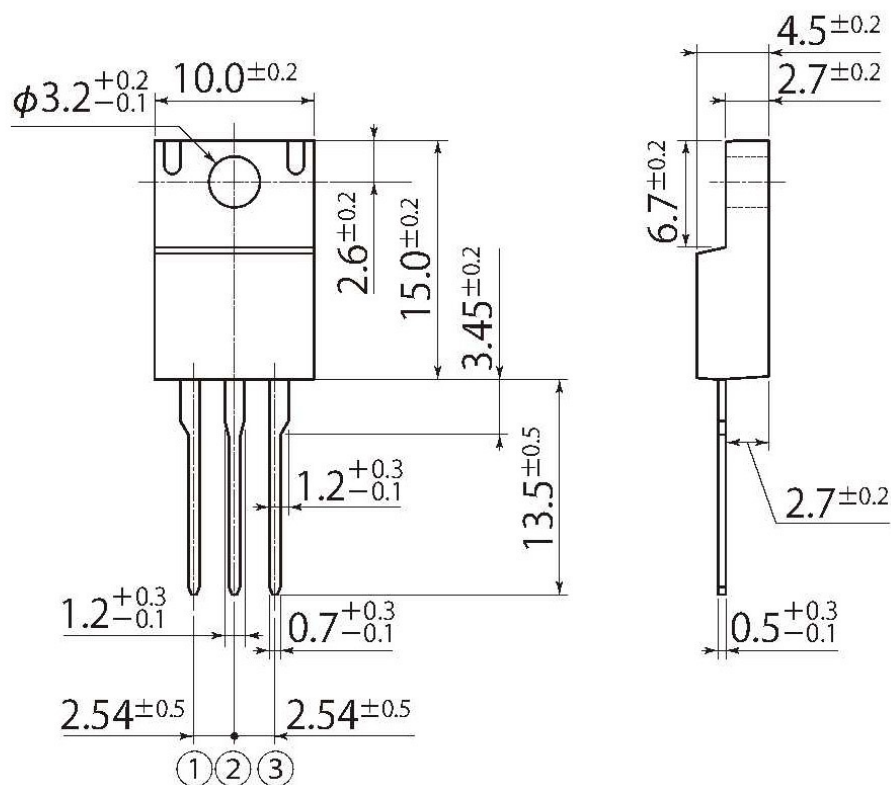


SG20SC4M Transient Thermal Impedance



J9

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



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