

SG30TC12M

Schottky Barrier Diodes  
120V, 30A

Feature

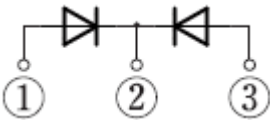
- High Recovery Speed
- Tj=175°C
- Ultra low I<sub>R</sub>
- Pb free terminal
- RoHS:Yes

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 175	°C
Junction temperature	Tj		175	°C
Repetitive peak reverse voltage	V <sub>RRM</sub>		120	V
Average forward current	I <sub>F(AV)</sub>	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, Tc=122°C	30	A
Surge forward current	I <sub>FSM</sub>	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

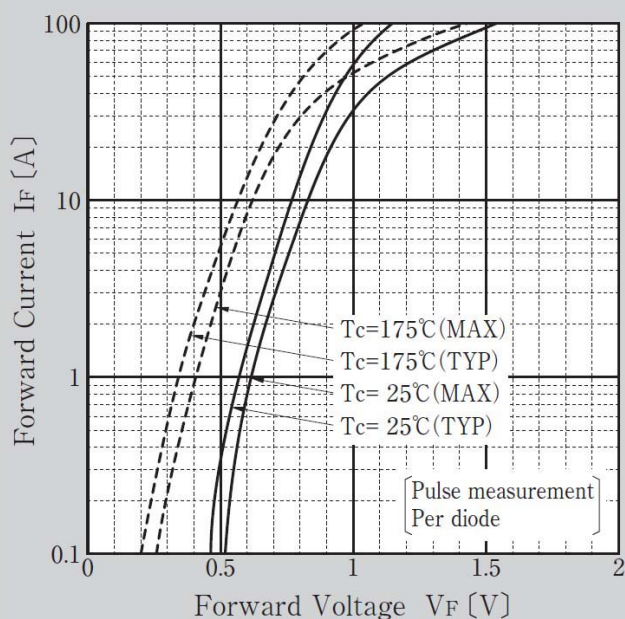
※ :See the original Specifications

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

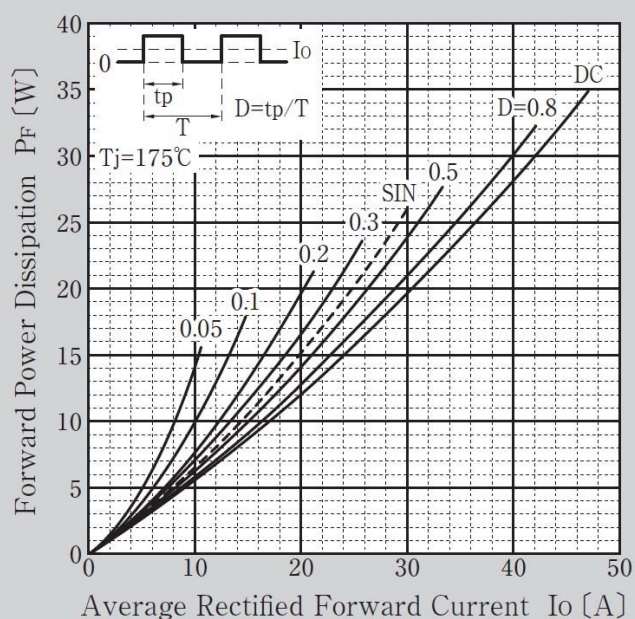
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =15A, Pulse measurement, per diode		0.81	0.87	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =120V, Pulse measurement, per diode			0.04	mA
Total capacitance	C <sub>t</sub>	f=1MHz, V <sub>R</sub> =10V, per diode		228		pF
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case			2	°C/W

※ : See the original Specifications

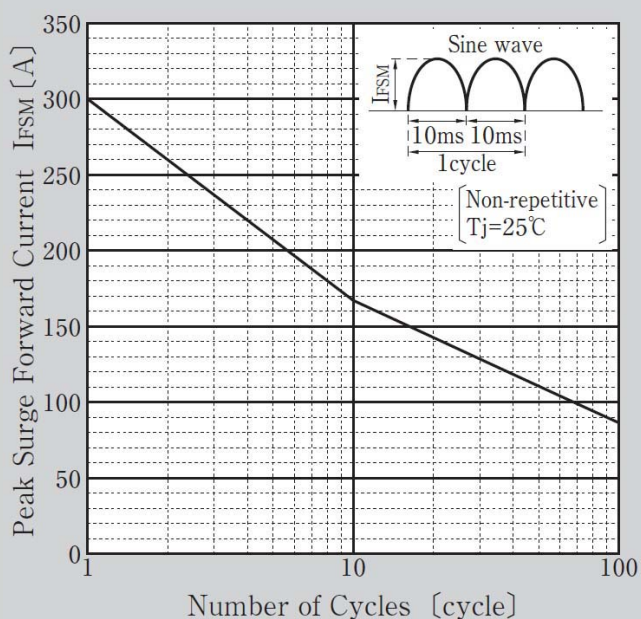
## Forward Voltage



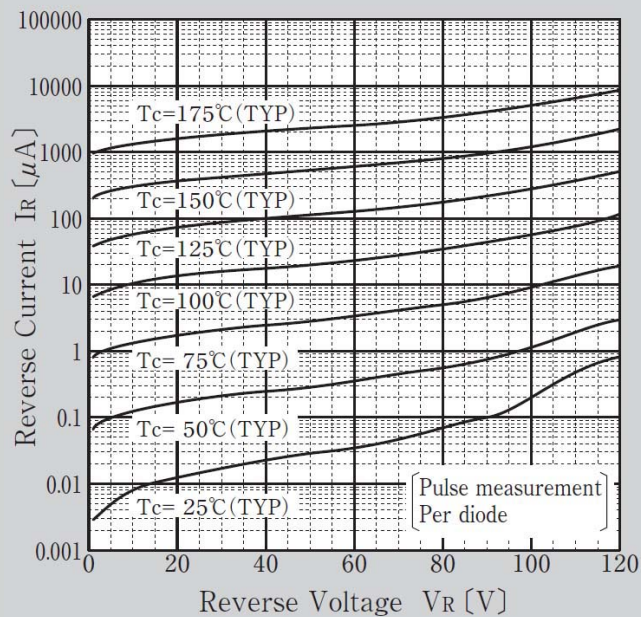
## Forward Power Dissipation



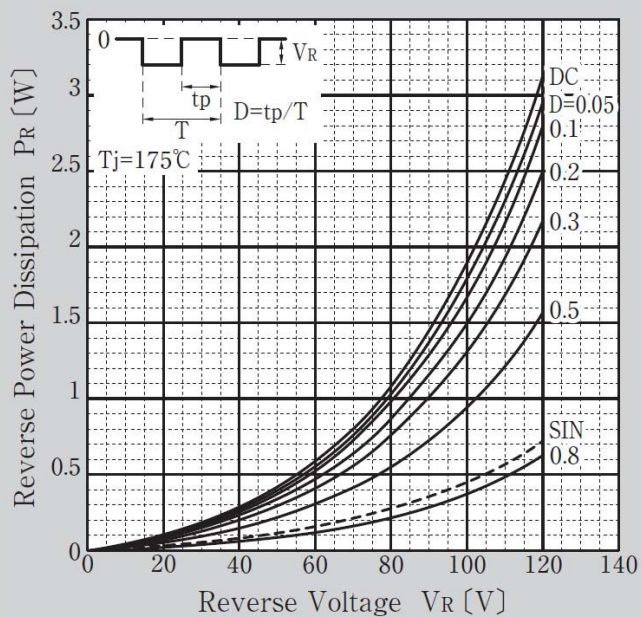
## Peak Surge Forward Current Capability



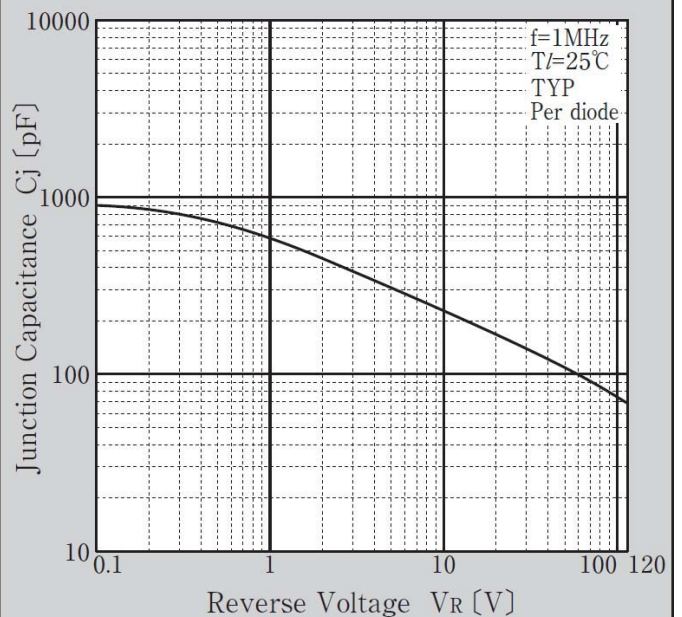
## Reverse Current



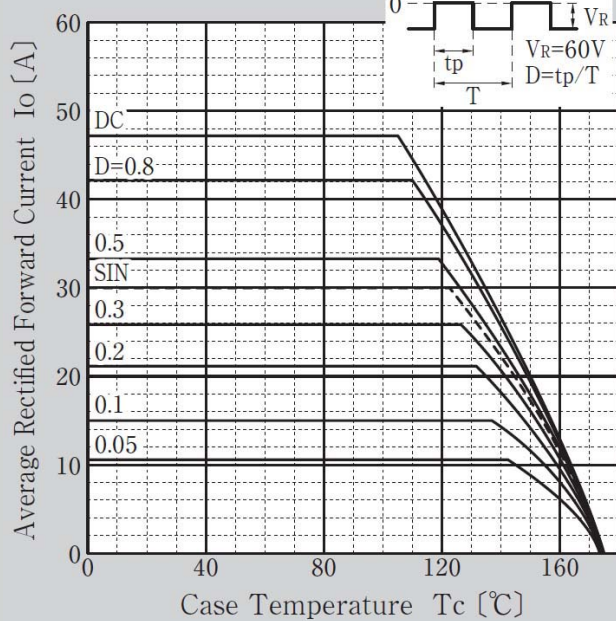
### Reverse Power Dissipation



### Junction Capacitance

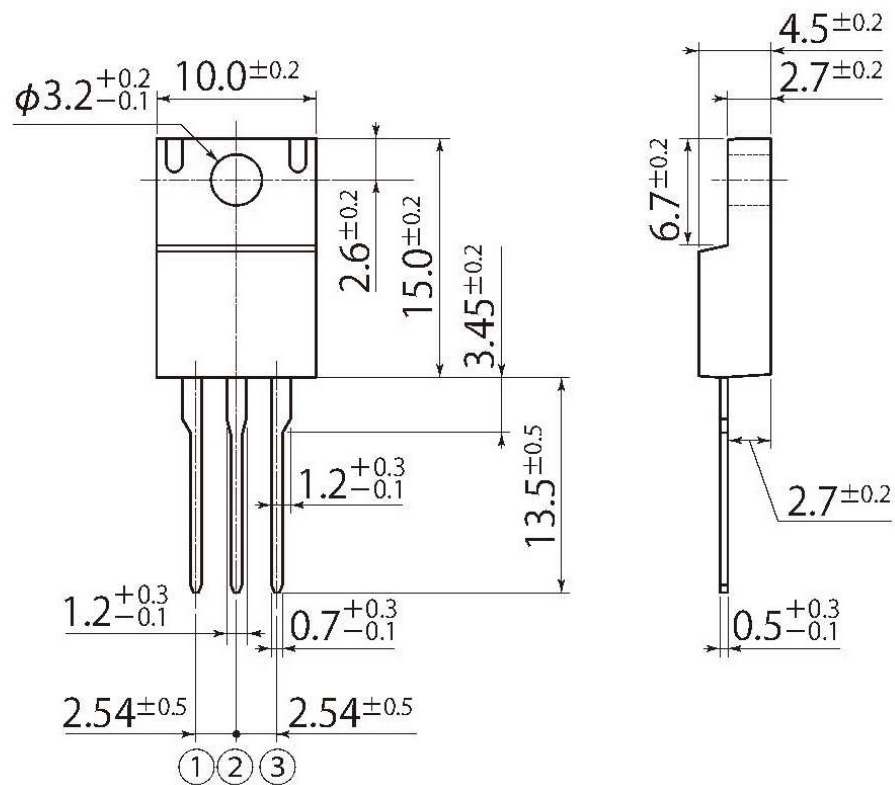


### Derating Curve $T_c$ - $I_o$



J9

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





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