

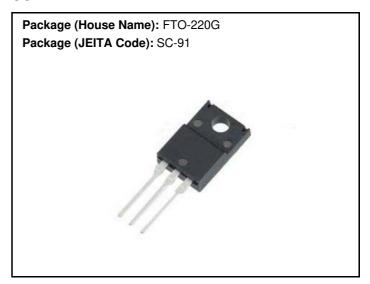
# SG30SC3LM

# Schottky Barrier Diodes 30V, 30A

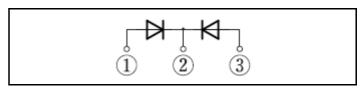
## **Feature**

- · High Recovery Speed
- $\bullet \ Low \ V_F$
- Pb free terminal
- RoHS:Yes

# **OUTLINE**



# **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	$V_{RRM}$		30	V
Repetitive peak surge reverse voltage	$V_{RRSM}$	Pulse width 0.5ms, duty=1/40	35	V
Average forward current	I <sub>F</sub> (AV)	50Hz sine wave, Resistance load, Rating for each diode IF(AV)/2, With heatsink, Tc=117°C	30	А
Surge forward current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive, 1cycle, Peak value, Tj=25°C	350	А
Surge forward current	I <sub>FSM1</sub>	tp=1ms, Sine wave, Non-repetitive, Peak value, Tj=25°C	685	А
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

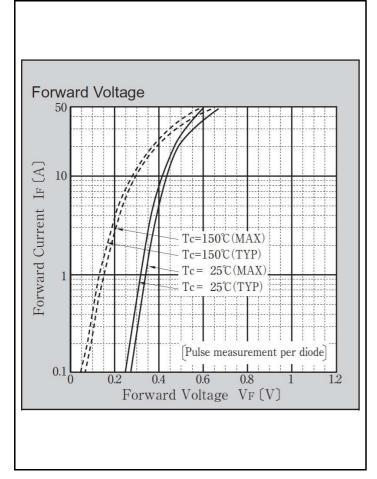
st :See the original Specifications

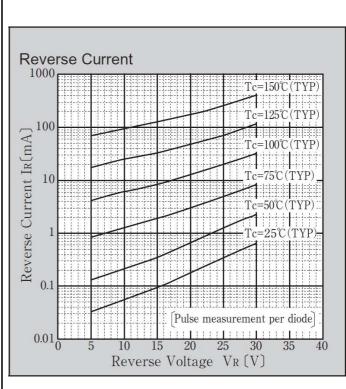
# **Electrical Characteristics** (unless otherwise specified : Tc=25°C)

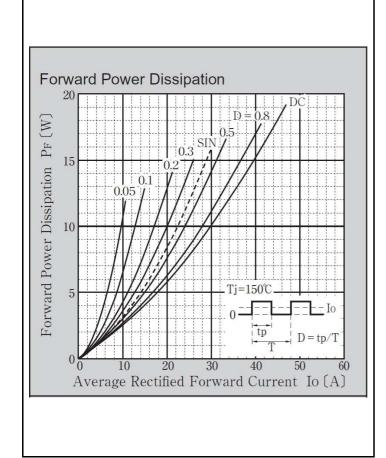
Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V <sub>F</sub>	IF=12.5A, Pulse measurement, per diode		0.42	0.45	V
Reverse current	I <sub>R</sub>	VR=30V, Pulse measurement, per diode			15	mA
Total capacitance	Ct	f=1MHz, VR=10V, per diode		960		pF
Thermal resistance	Rth(j-c)	Junction to case, With heatsink			1.7	°C/W

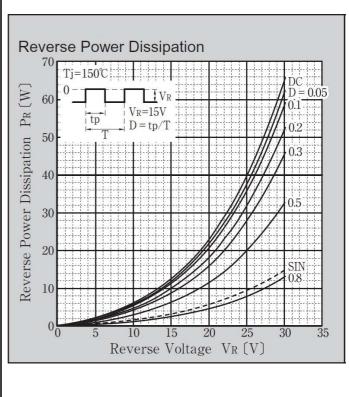
<sup>\*</sup> :See the original Specifications

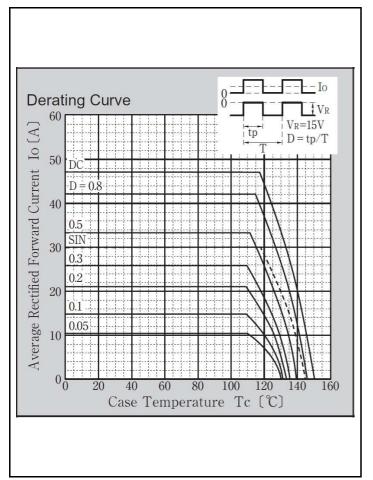
# **CHARACTERISTIC DIAGRAMS**

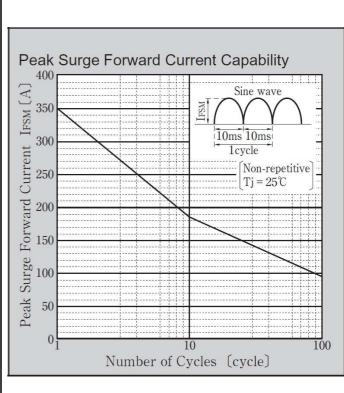


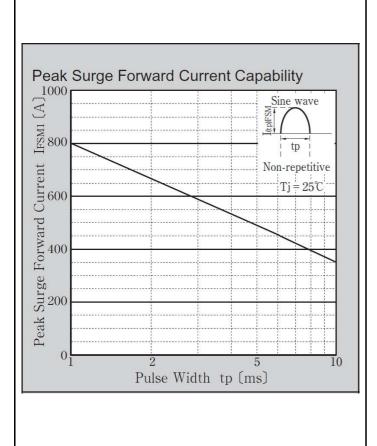


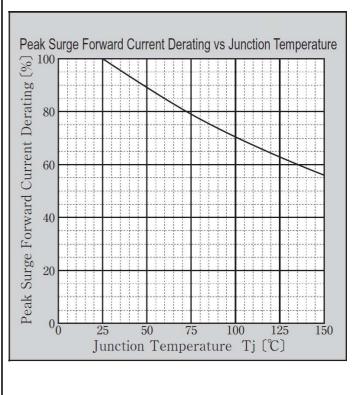


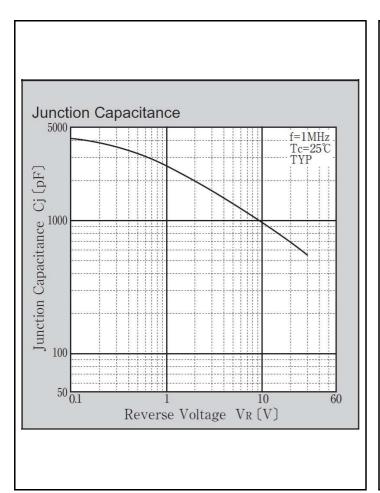


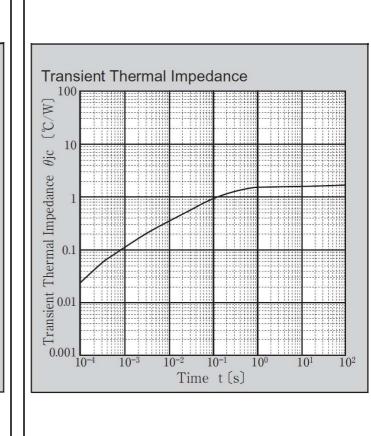










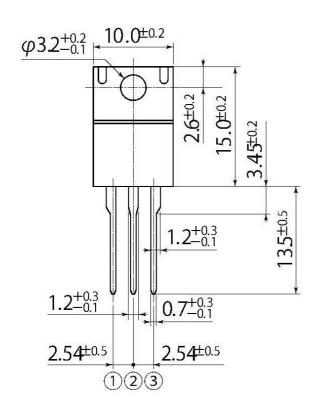


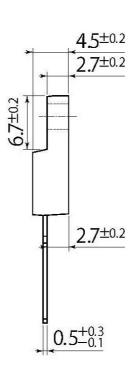
unit:mm

scale: 2/1

J9

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





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