

# SHINDENGEN

## Super Fast Recovery Rectifiers

Single

# SF5L30

## 300V 5A

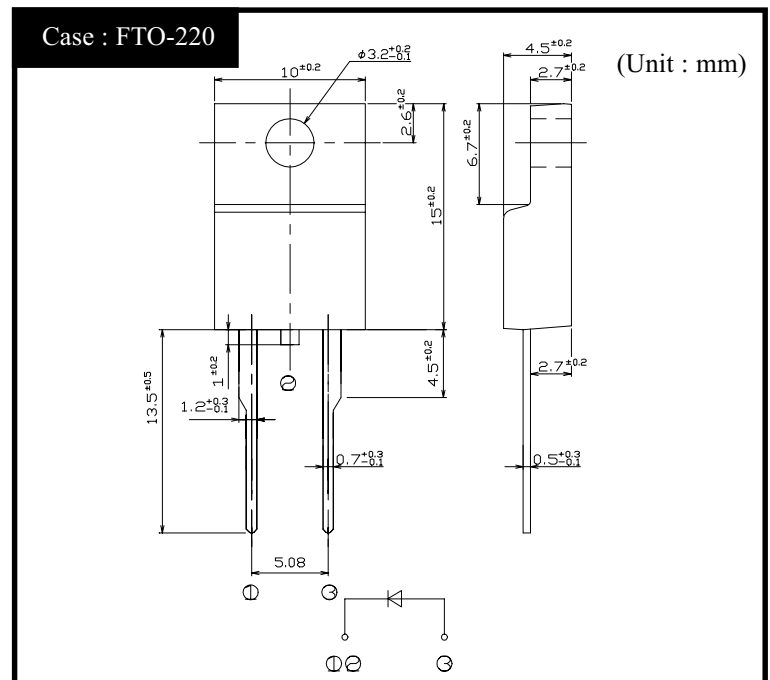
### FEATURES

- trr30ns
- Fully Isolated Molding
- Dielectric strength 2kV guaranteed

### APPLICATION

- Switching power supply
- Free Wheel
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

### OUTLINE DIMENSIONS



### RATINGS

#### ● Absolute Maximum Ratings (If not specified Tc=25°C)

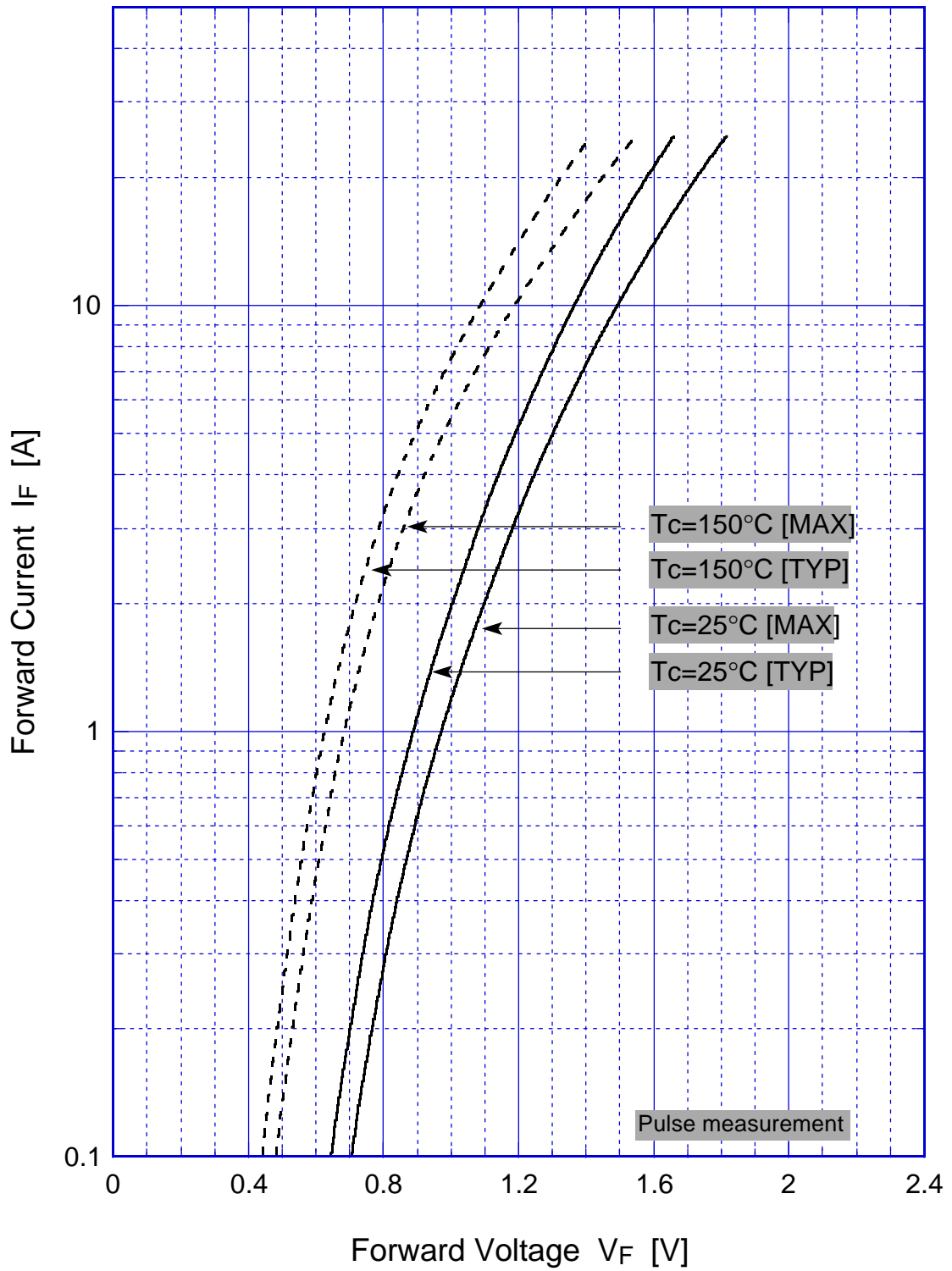
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-55~150	°C
Operating Junction Temperature	T <sub>j</sub>		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		300	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load, Tc=130°C	5	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25 °C	60	A
Dielectric Strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 0.3N·m)	0.5	N·m

#### ● Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =5A, Pulse measurement	Max.1.3	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement	Max.25	μA
Reverse Recovery Time	trr	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A	Max.30	ns
Junction Capacitance	C <sub>j</sub>	f=1MHz, V <sub>R</sub> =10V	TYP 50	pF
Thermal Resistance	θ <sub>jc</sub>	junction to case	Max.3.4	°C/W

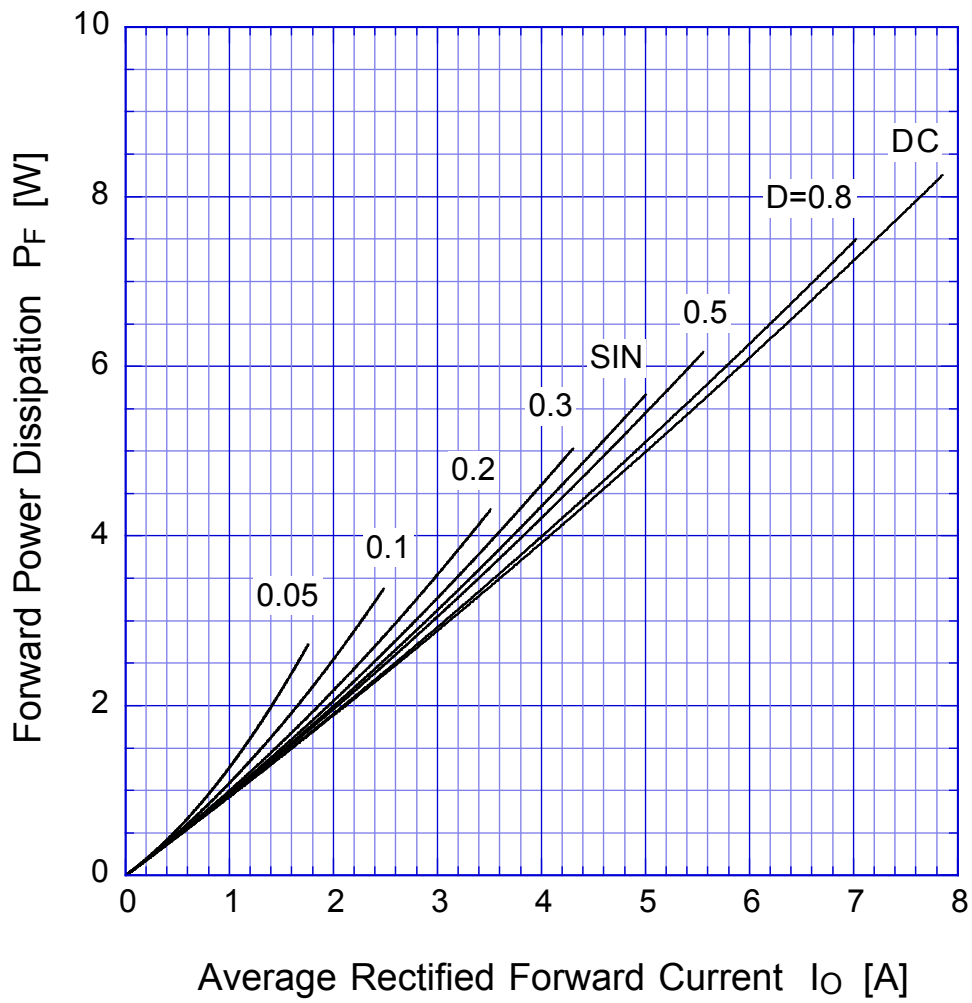
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## Forward Voltage

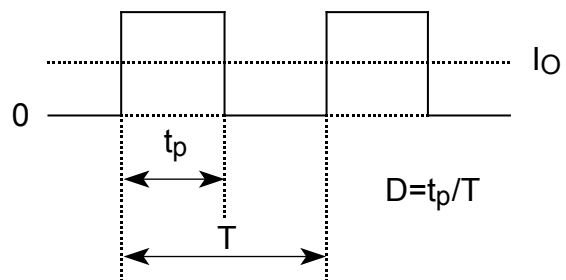


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## Forward Power Dissipation

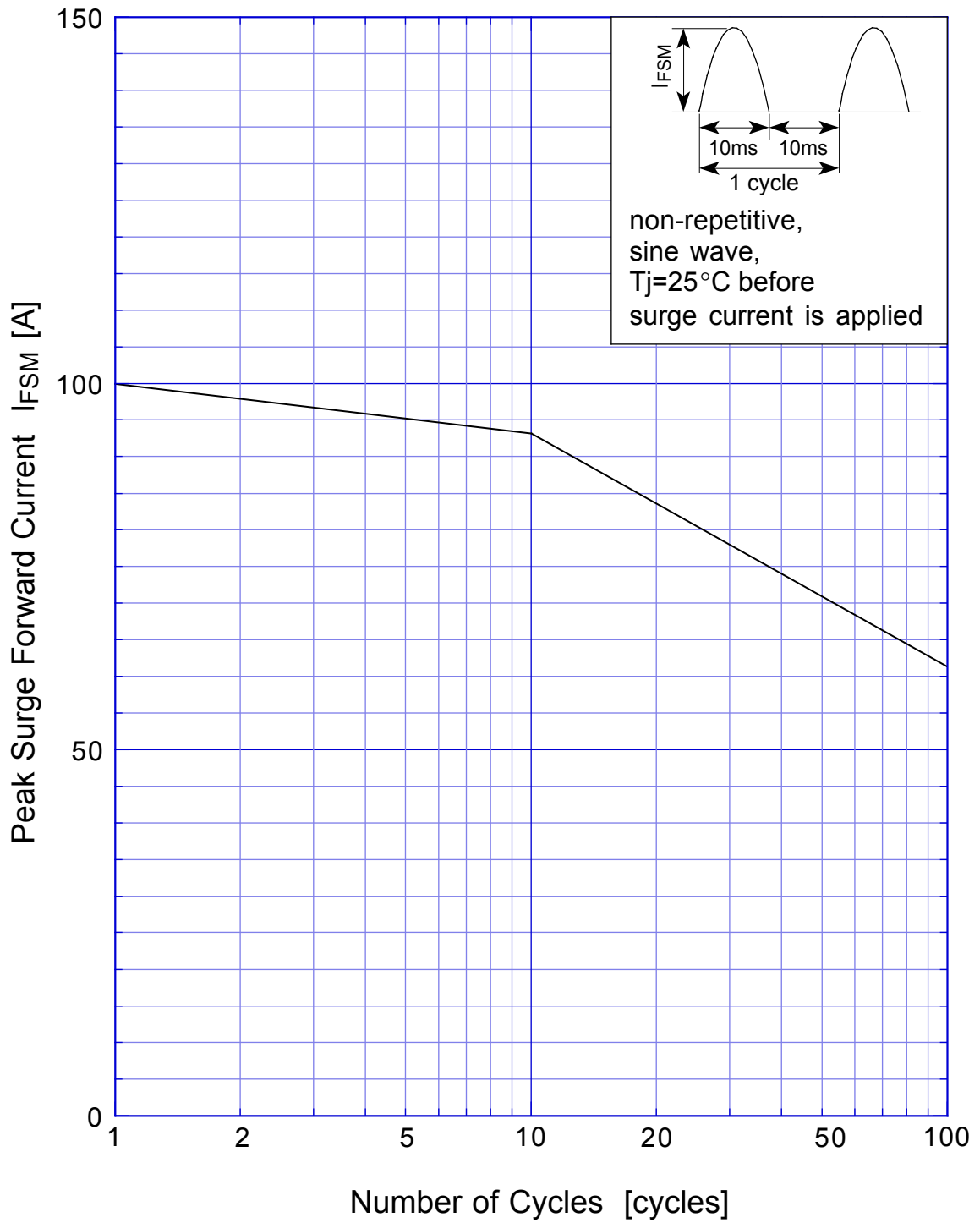


$T_j = 150^\circ\text{C}$



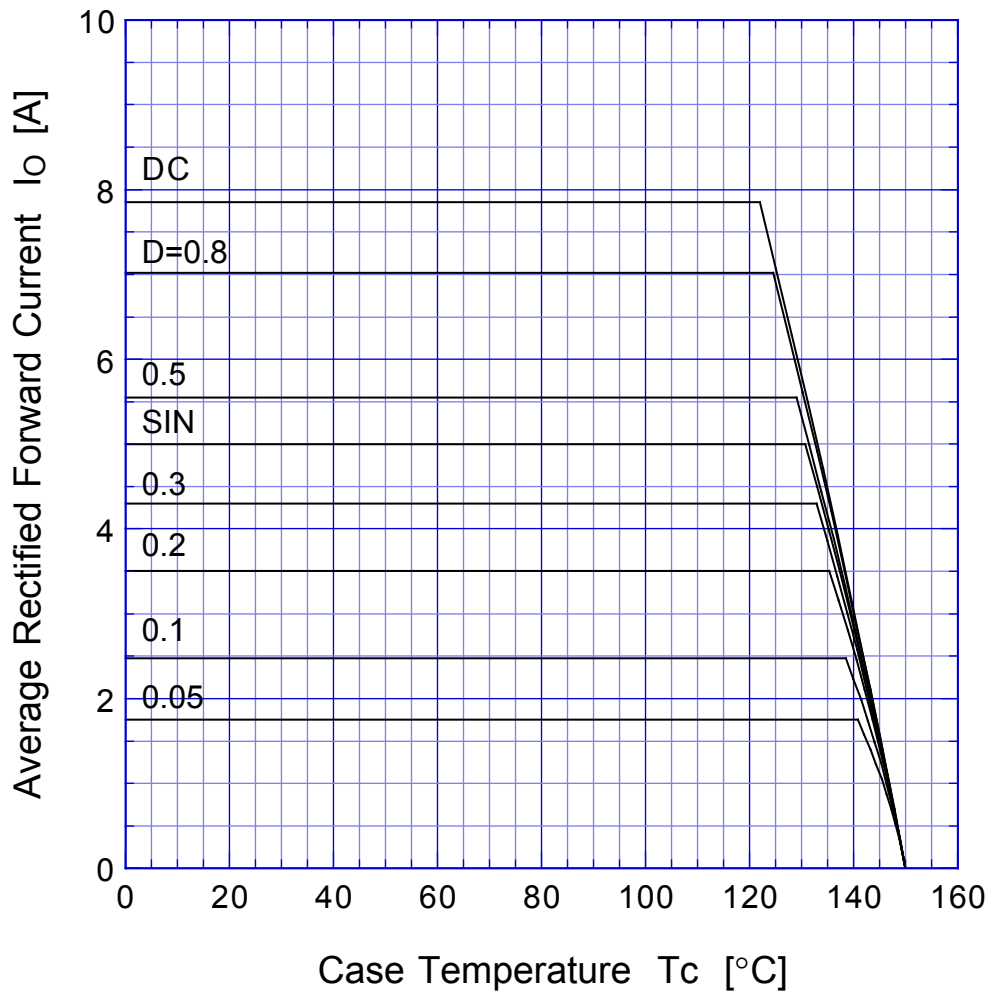
# SF5L30

## Peak Surge Forward Capability



# SF5L30

# Derating Curve



$$V_R = V_{RM}$$



# SF5L30 Junction Capacitance

