

SHINDENGEN

Super Fast Recovery Rectifiers

Single

S30L60

600V 30A

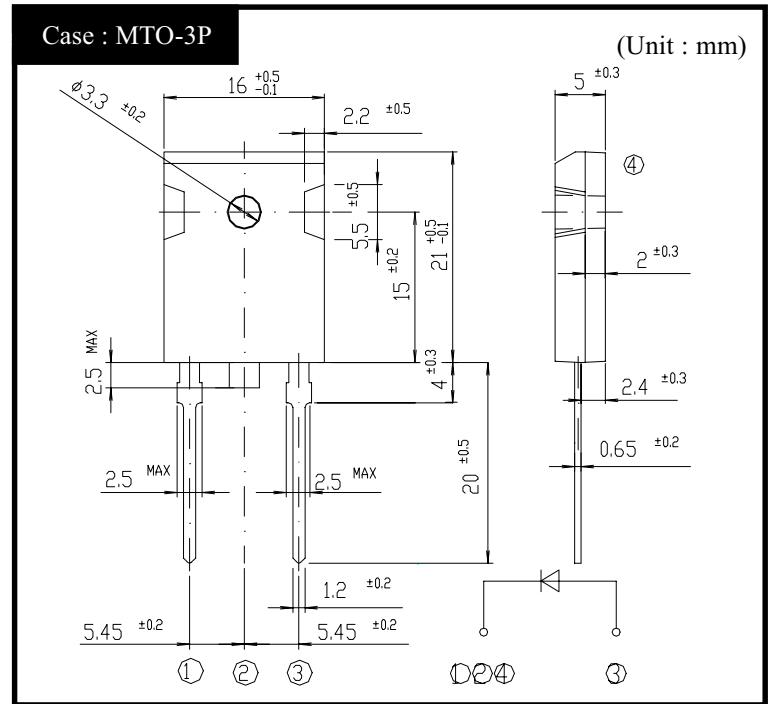
FEATURES

- High Voltage
- trr150ns
- Small θ_{jc}

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings (If not specified $T_c=25^\circ\text{C}$)

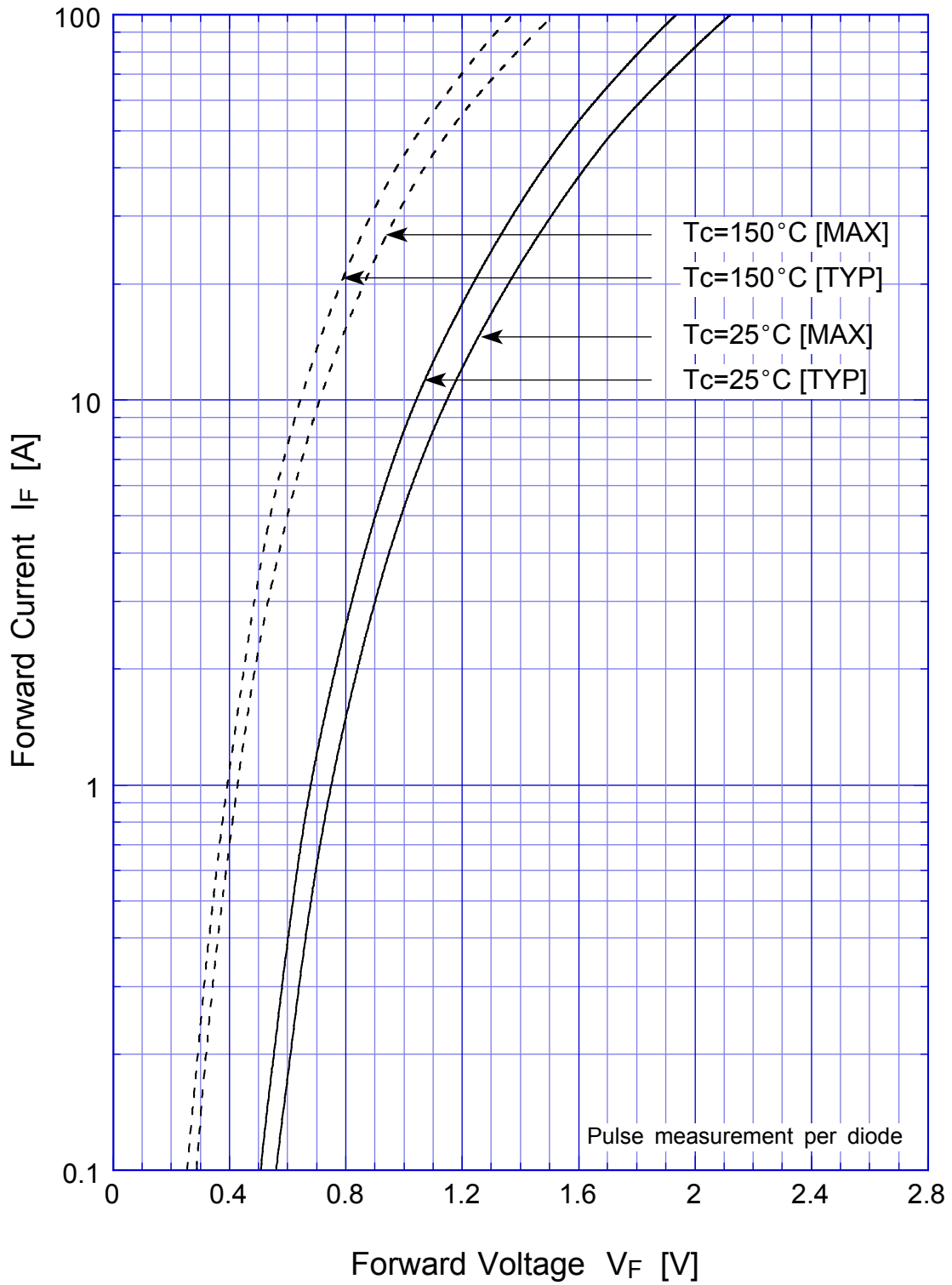
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-55~150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, $T_c=117^\circ\text{C}$	30	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	600	A
Mounting Torque	TOR	(Recommended torque:0.5N·m)	0.8	N·m

● Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=30\text{A}$, Pulse measurement	Max.1.5	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement	Max.25	μA
Reverse Recovery Time	trr	$I_F=0.5\text{A}$, $I_R=1\text{A}$	Max.150	ns
Thermal Resistance	θ_{jc}	junction to case	Max.0.7	$^\circ\text{C}/\text{W}$

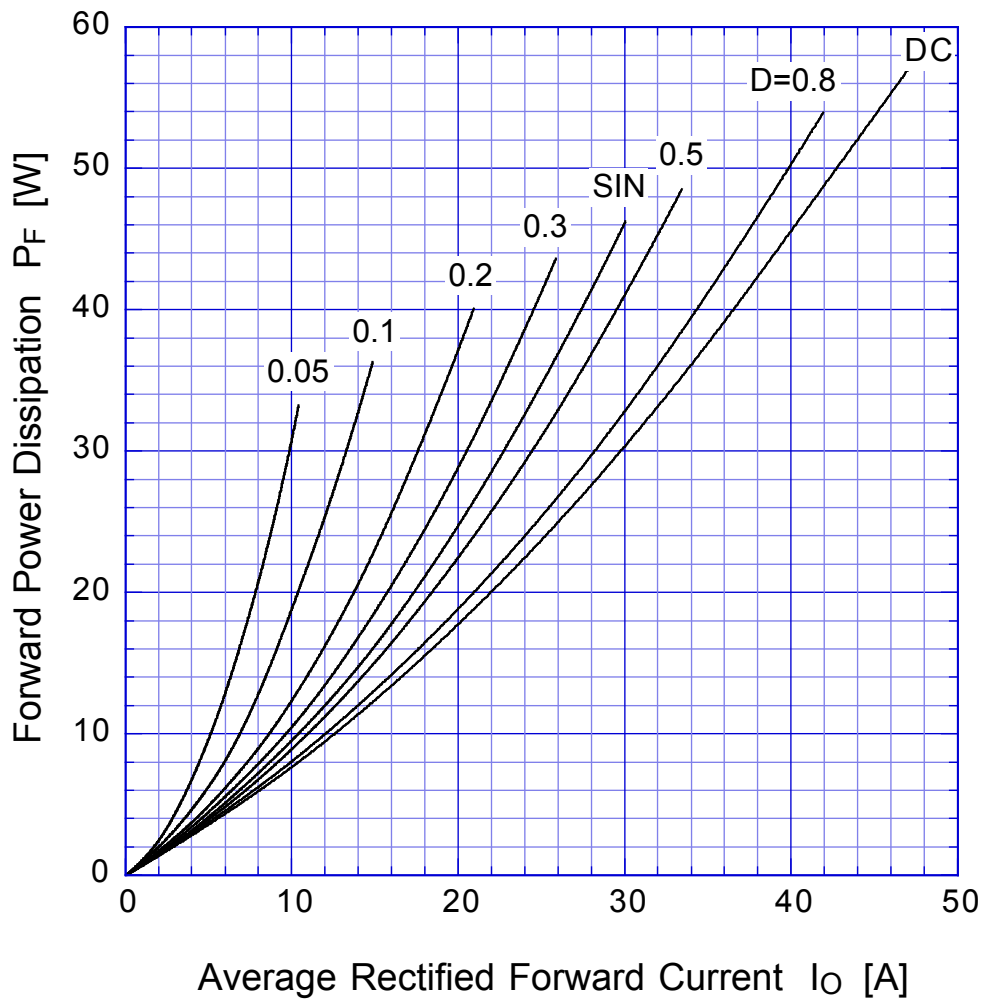
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Forward Voltage

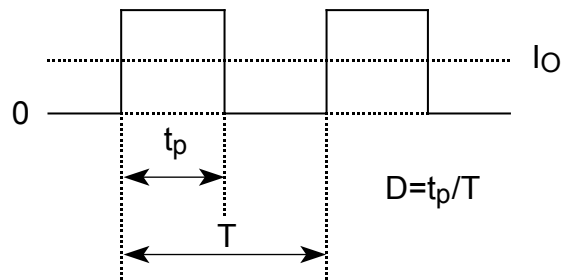


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Forward Power Dissipation

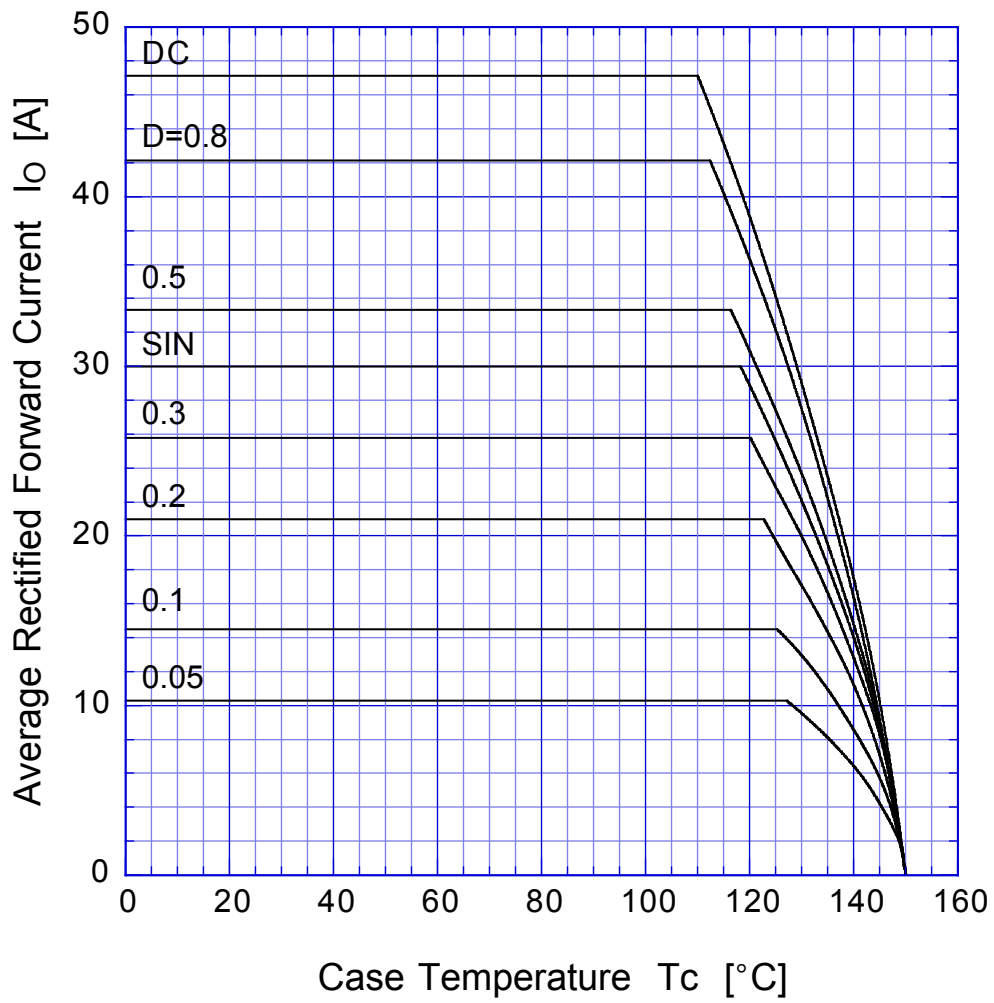


$T_j = T_{jmax}$



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Derating Curve

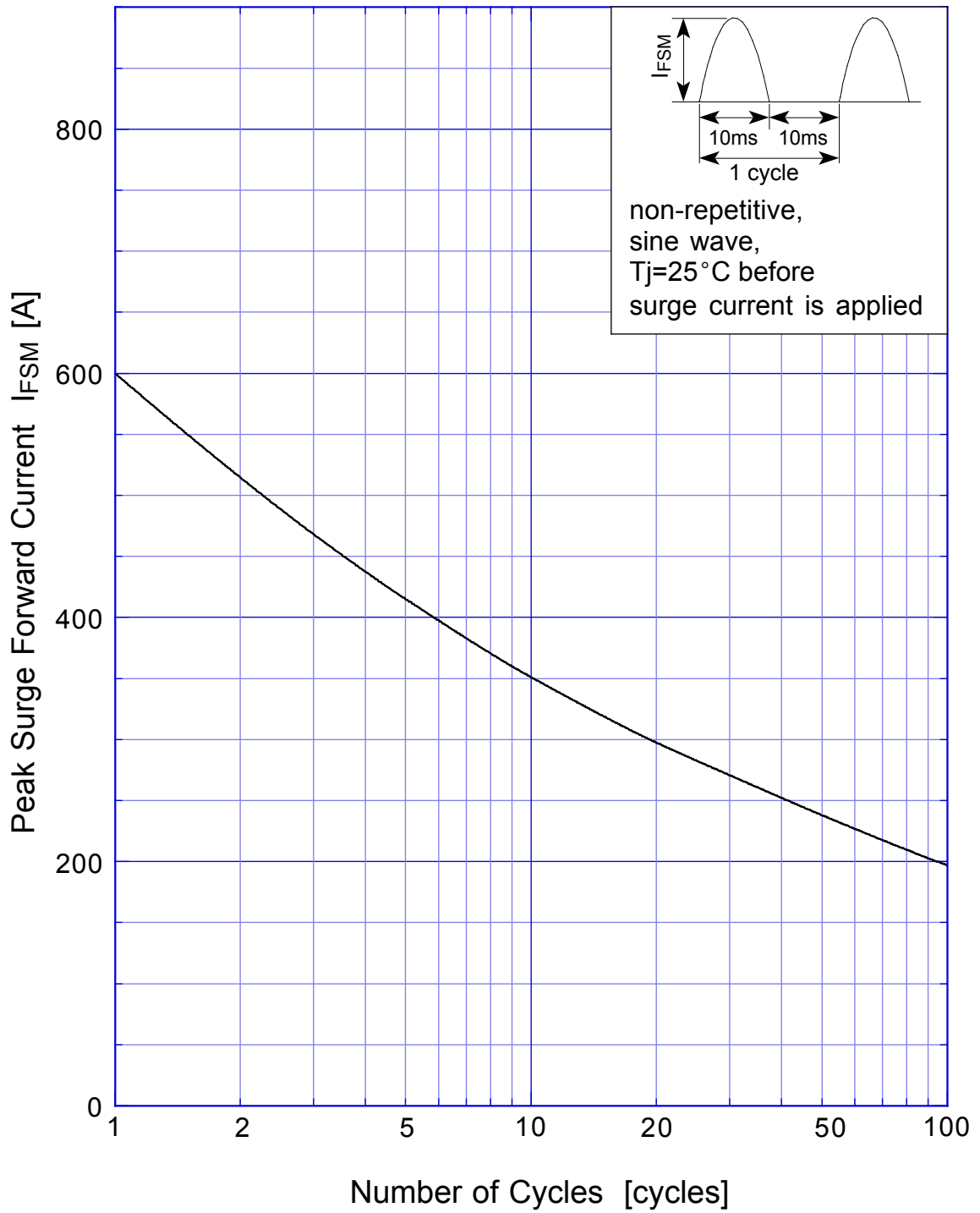


$$V_R = V_{RM}$$



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Peak Surge Forward Capability



S30L60 Junction Capacitance

