

# SHINDENGEN

## Super Fast Recovery Rectifiers

Single

# DF20L60

## 600V 20A

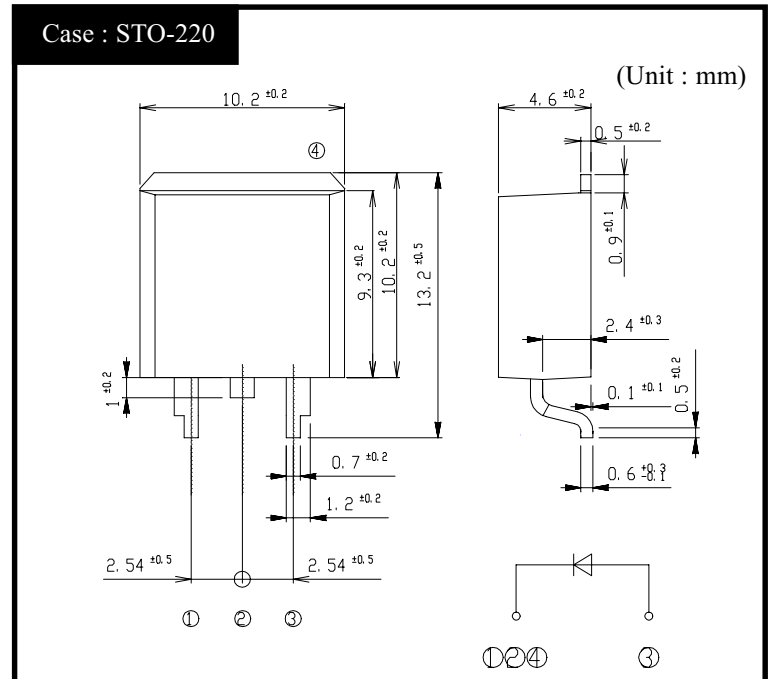
### FEATURES

- SMT
- High Voltage
- trr70ns

### APPLICATION

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

### OUTLINE DIMENSIONS



### RATINGS

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

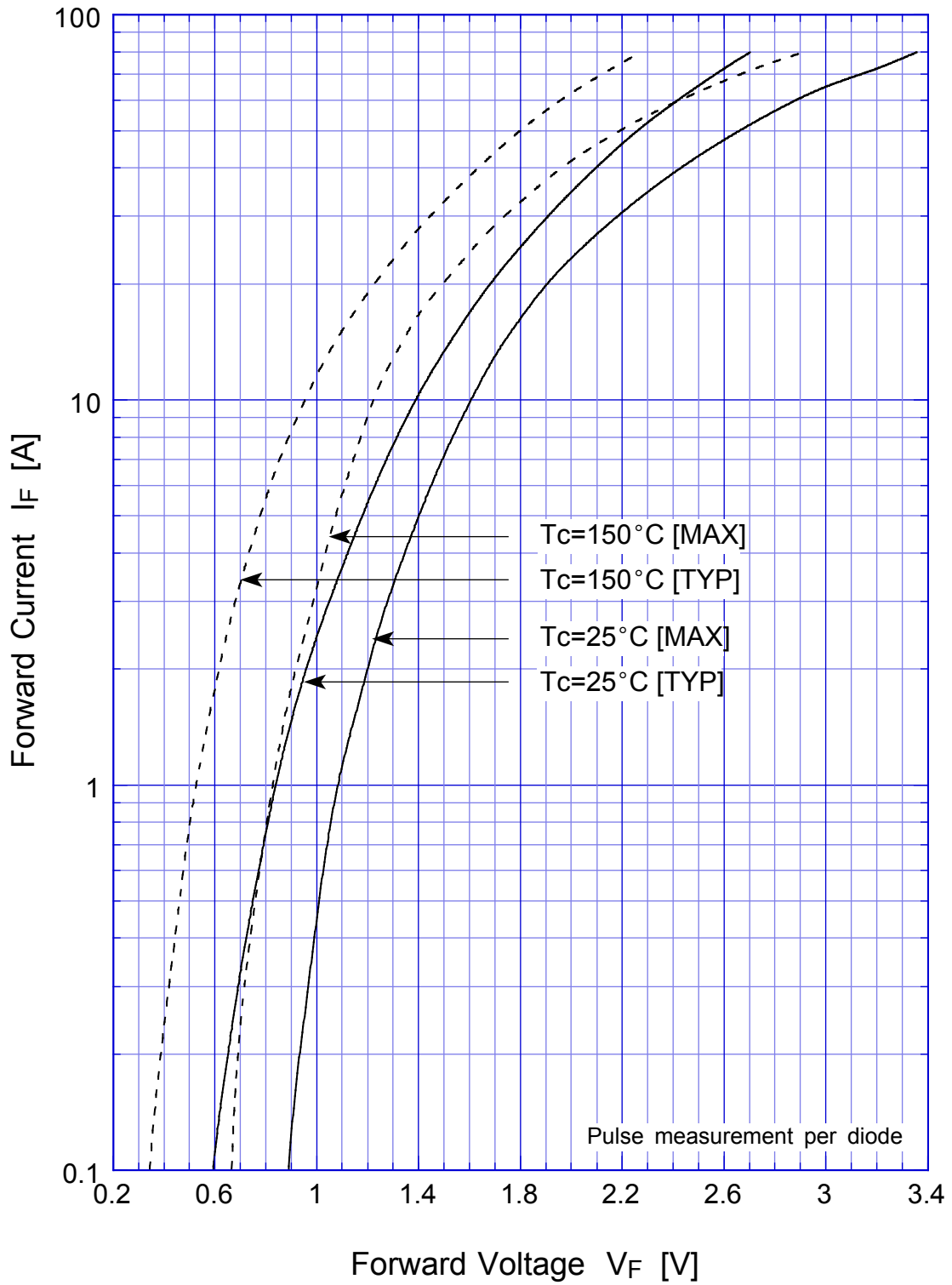
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-55~150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		600	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load, Tc=84°C	20	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	170	A

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

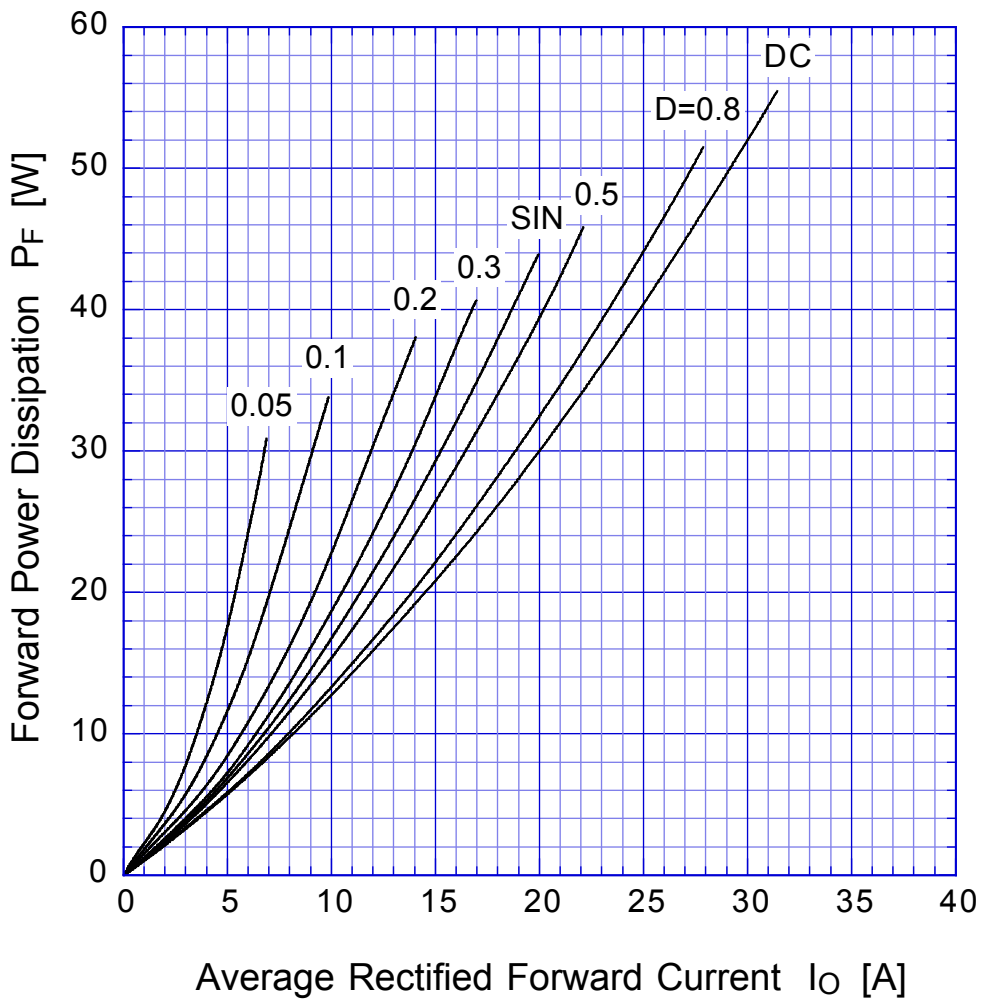
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20A, Pulse measurement	Max.1.9	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement	Max.25	μA
Reverse Recovery Time	trr	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A	Max.70	ns
Thermal Resistance	θ <sub>jc</sub>	junction to case	Max.1.5	°C/W

# DF20L60

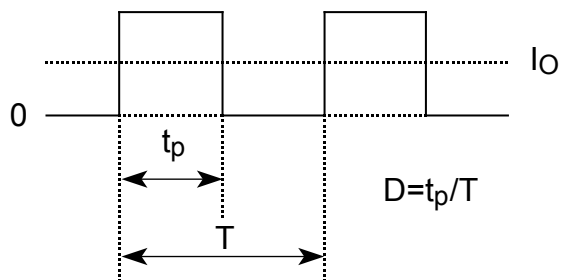
## Forward Voltage



# DF20L60 Forward Power Dissipation

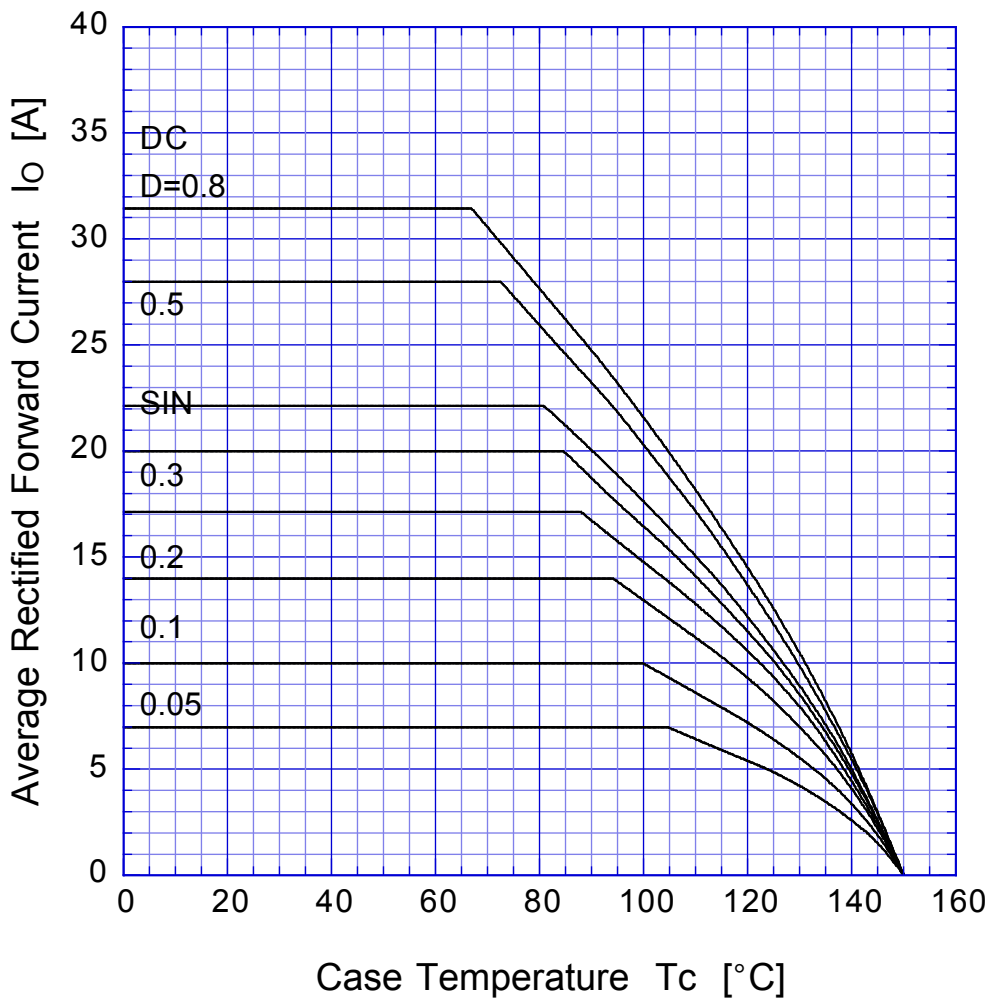


$T_j = T_{jmax}$



# DF20L60

# Derating Curve

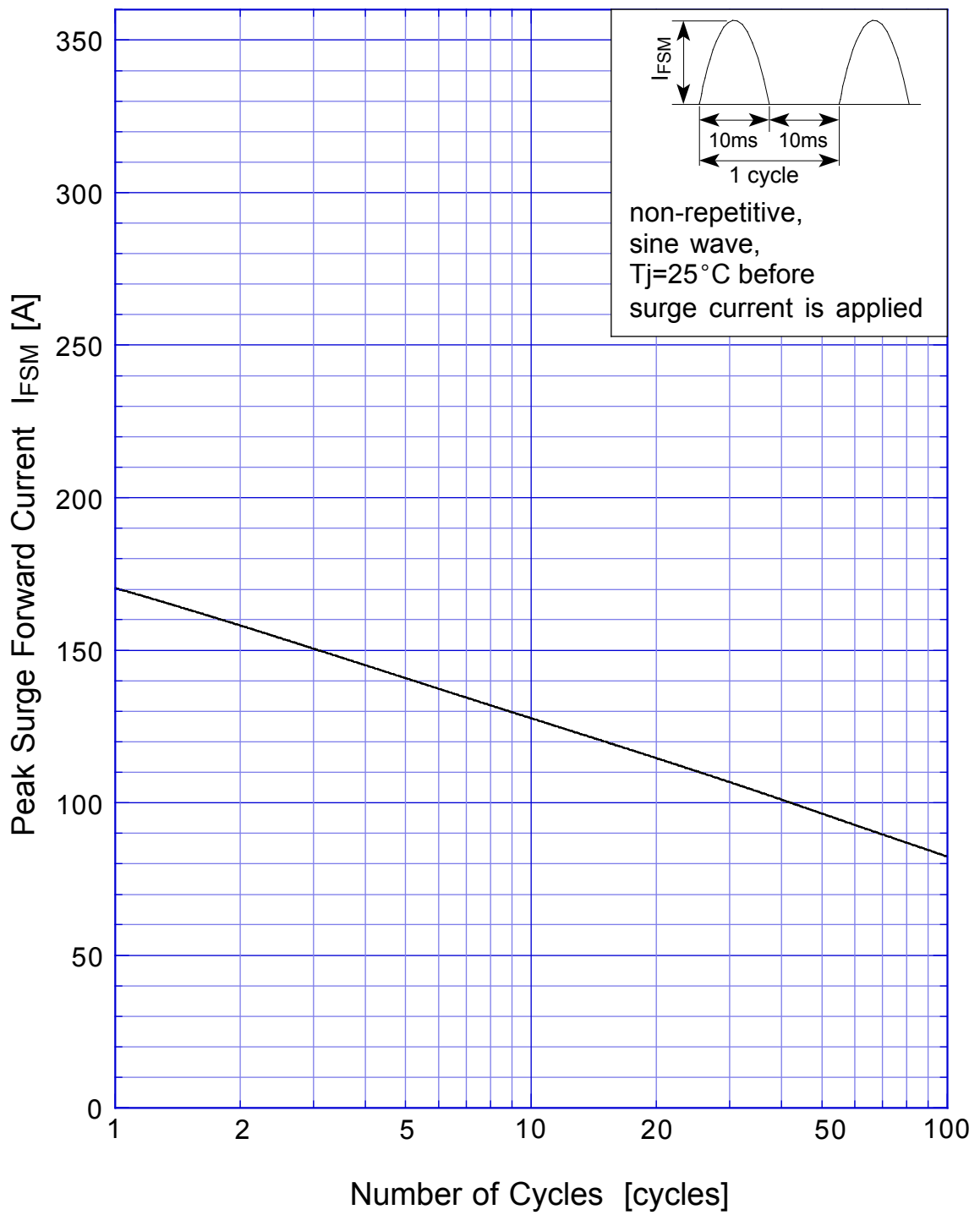


$$V_R = V_{RM}$$



# DF20L60

## Peak Surge Forward Capability



# DF20L60 Junction Capacitance

