

# SHINDENGEN

## Super Fast Recovery Rectifiers

Dual

# DF20LC20U

## 200V 20A

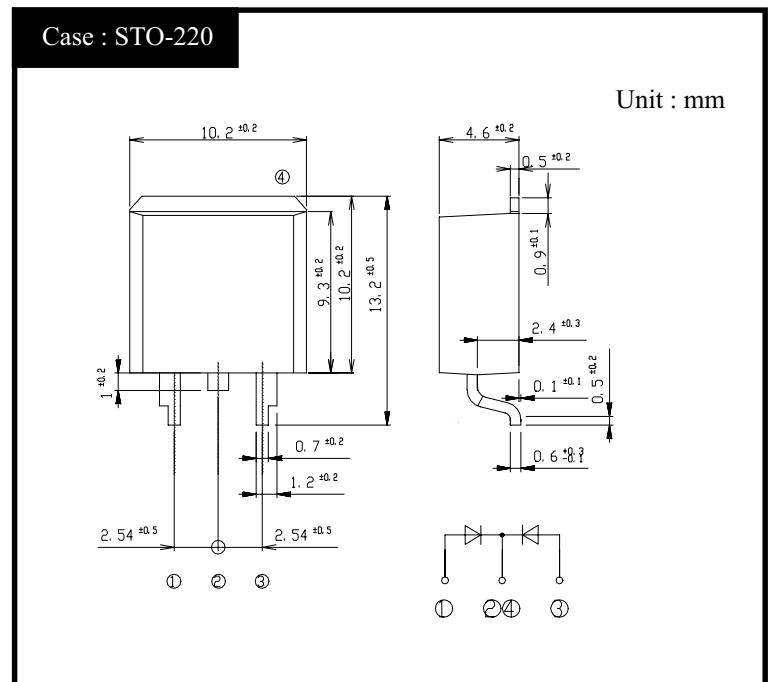
### FEATURES

- SMT
- Low noise
- trr35ns

### APPLICATION

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

### OUTLINE DIMENSIONS



### RATINGS

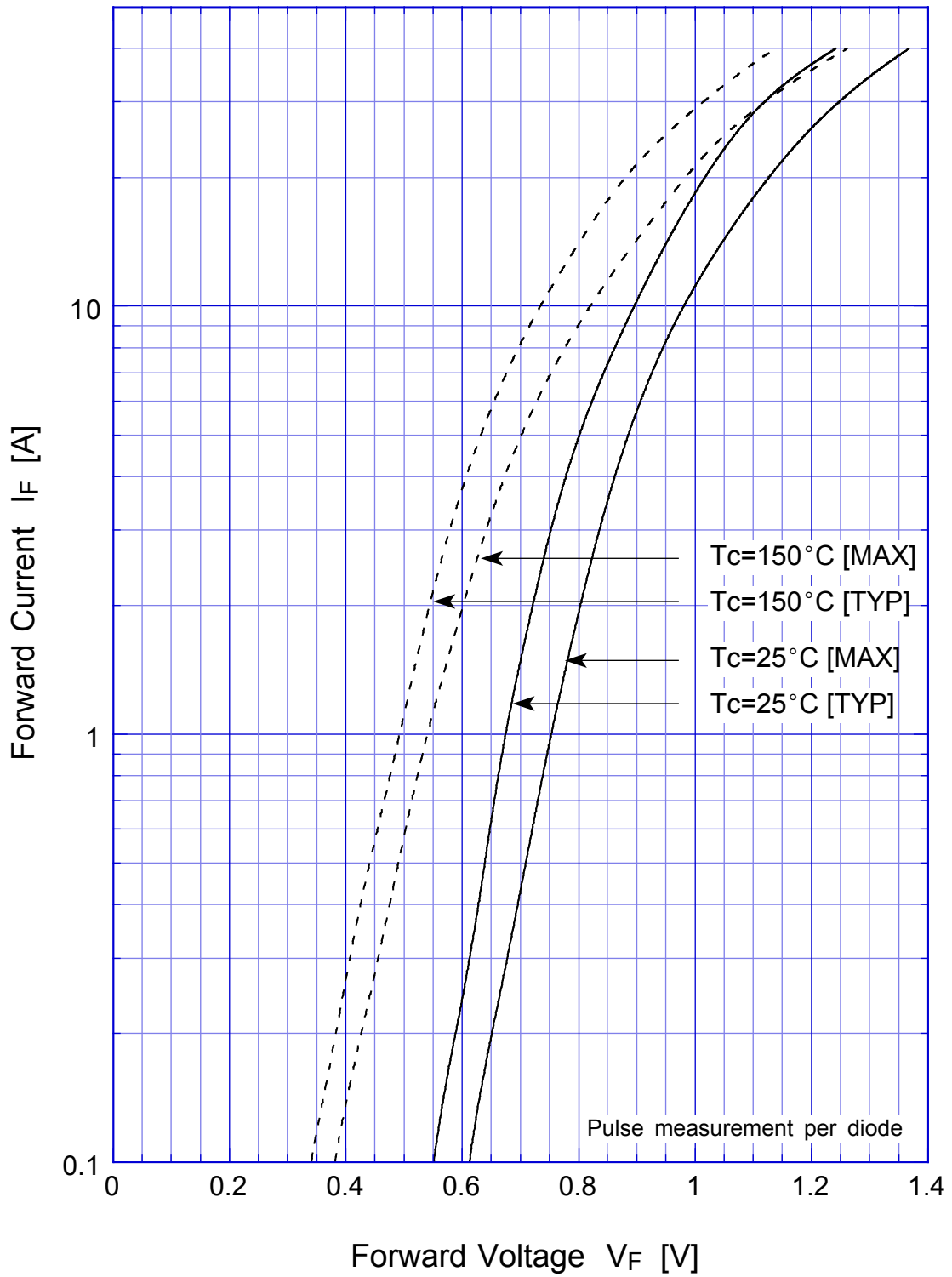
#### ● Absolute Maximum Ratings (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-40~150	°C
Operating Junction Temperature	T <sub>j</sub>		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		200	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load, Rating for each diode I <sub>o</sub> /2, T <sub>c</sub> =114°C	20	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25°C	140	A

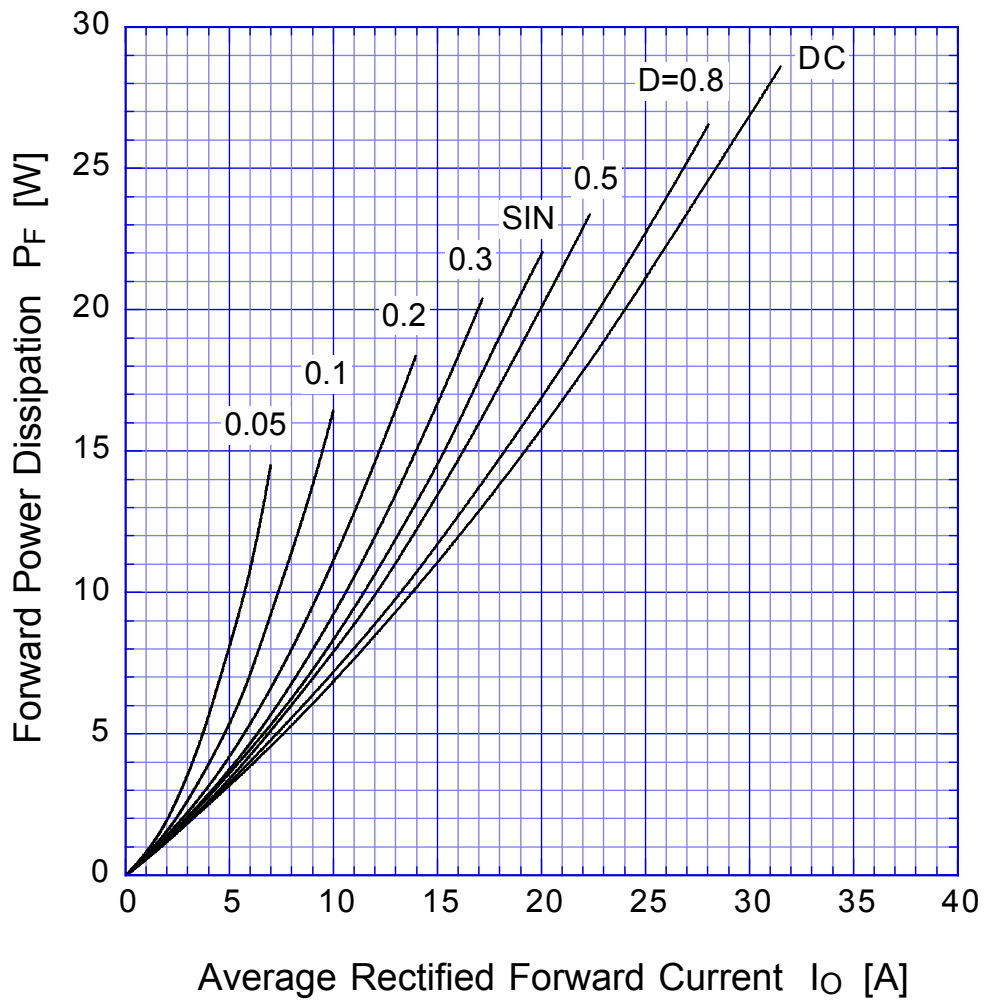
#### ● Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10A, Pulse measurement, Rating of per diode	Max.0.98	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max.10	μA
Reverse Recovery Time	trr	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, Rating of per diode	Max.35	ns
Thermal Resistance	θ <sub>jc</sub>	junction to case	Max.1.6	°C/W

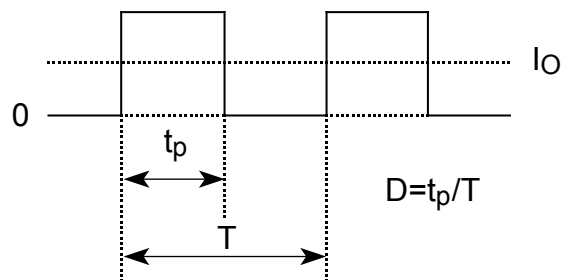
# DF20LC20U Forward Voltage



## DF20LC20U Forward Power Dissipation

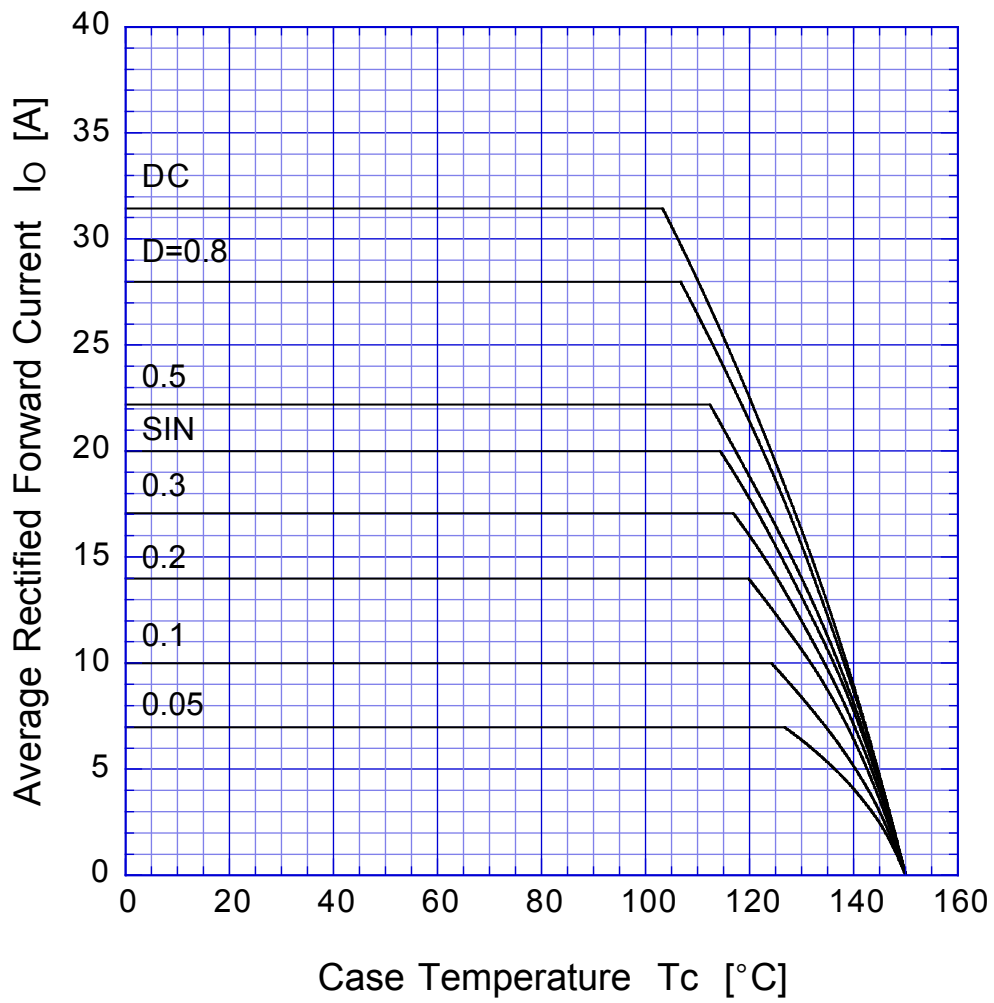


$T_j = T_{jmax}$

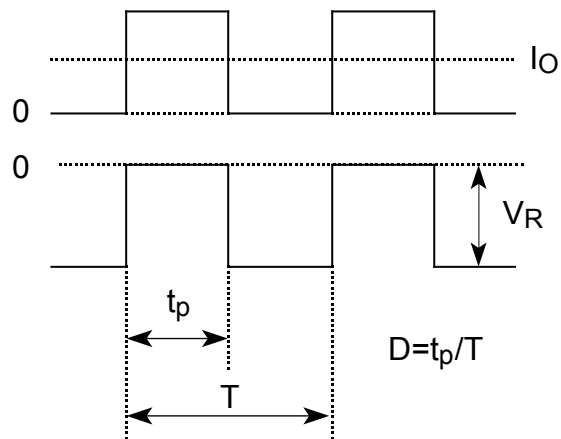


# DF20LC20U

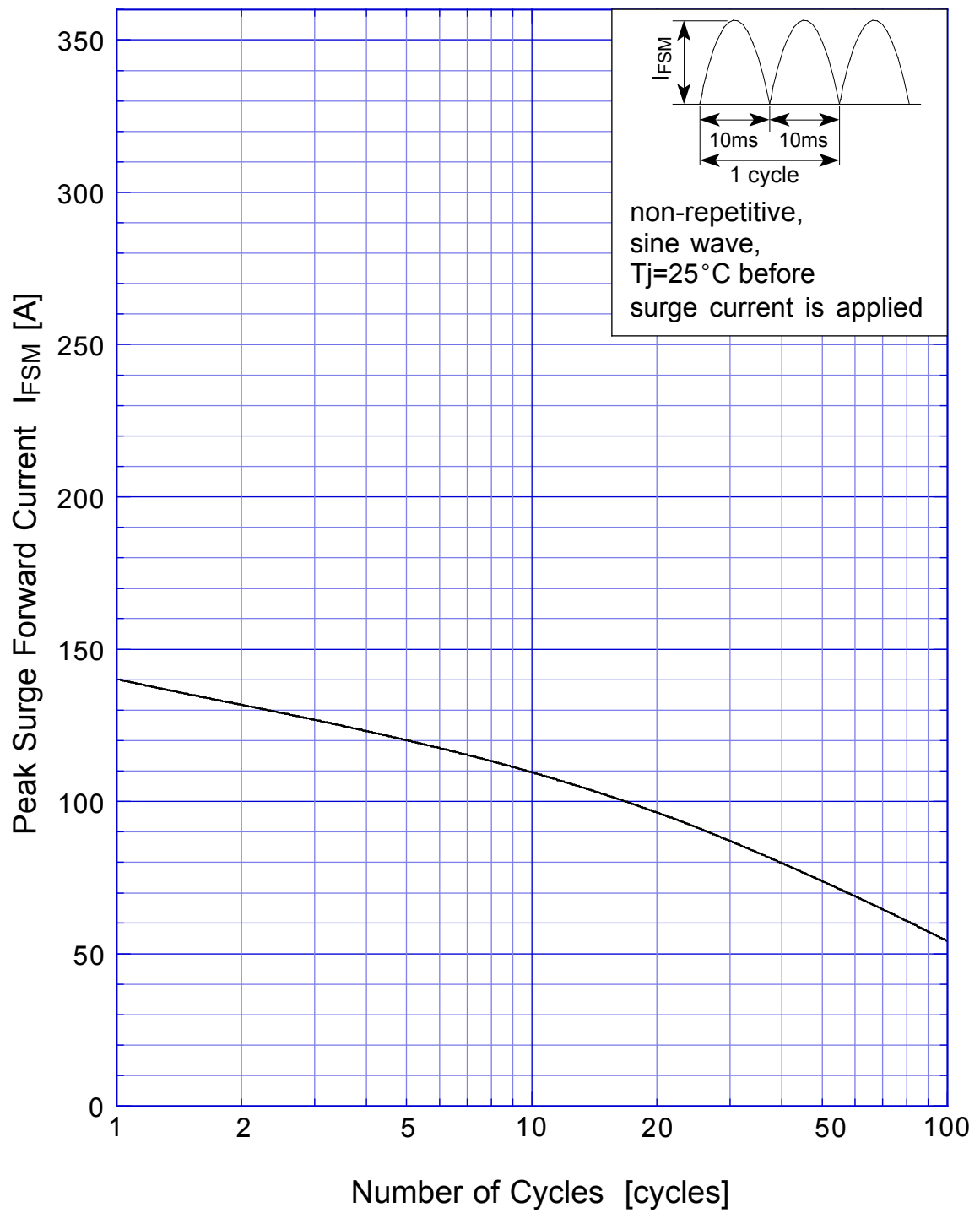
## Derating Curve



$$V_R = V_{RM}$$



## DF20LC20U Peak Surge Forward Capability



# DF20LC20U Junction Capacitance

