

# SHINDENGEN

## Super Fast Recovery Rectifiers

Single

# DE3L20U

## 200V 3A

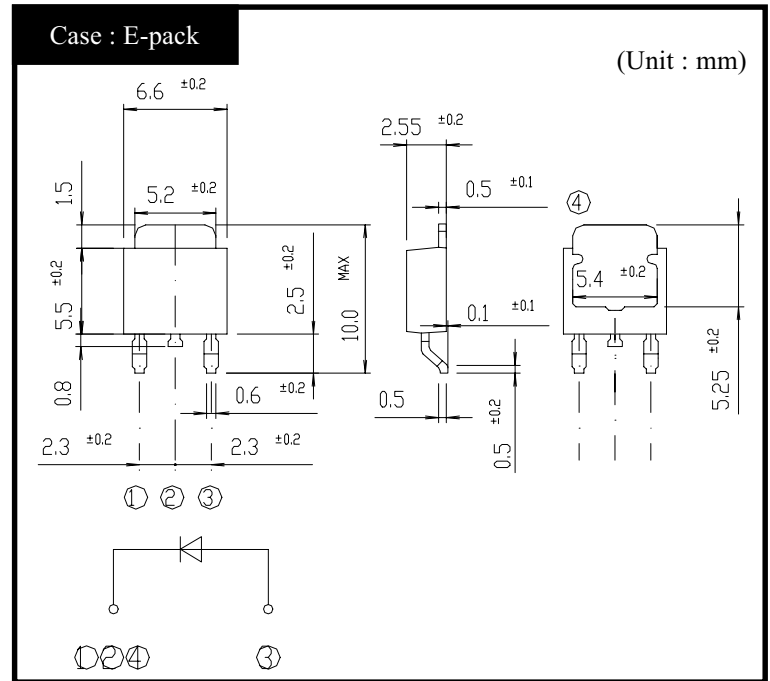
### FEATURES

- 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)

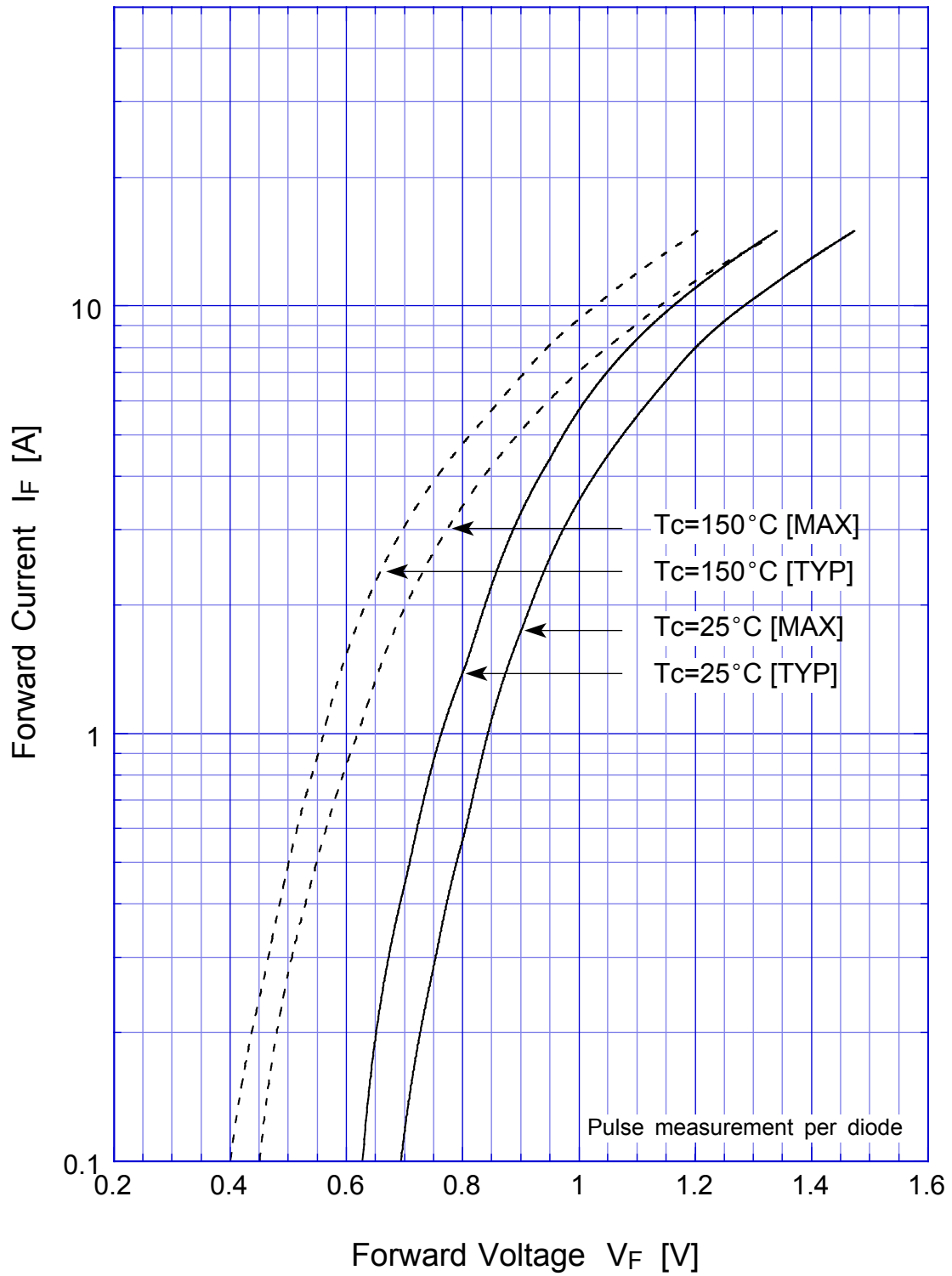
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-55~150	°C
Operating Junction Temperature	T <sub>j</sub>		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		200	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load, T <sub>c</sub> =113°C	3	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, T <sub>j</sub> =25°C	60	A

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

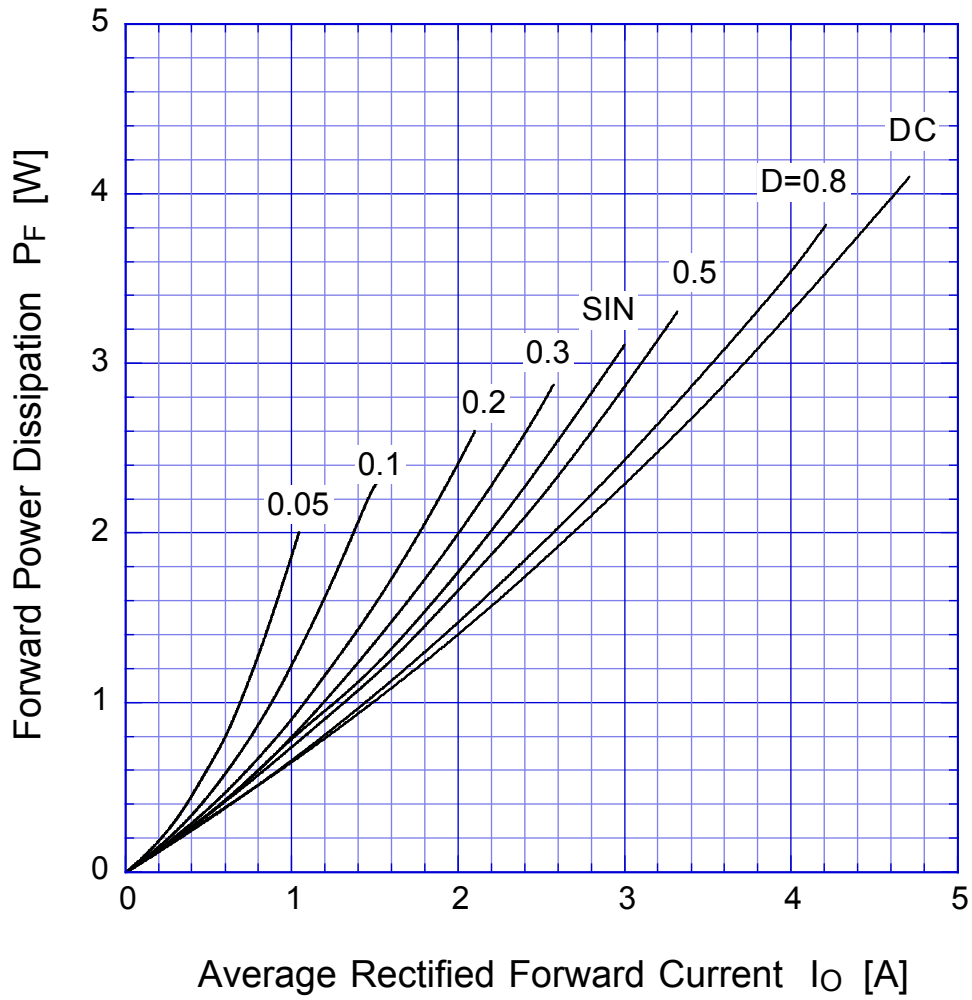
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =3A, Pulse measurement	Max.0.98	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement	Max.10	μA
Reverse Recovery Time	trr	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A	Max.35	ns
Thermal Resistance	θ <sub>jc</sub>	junction to case	Max.12	°C/W

# DE3L20U

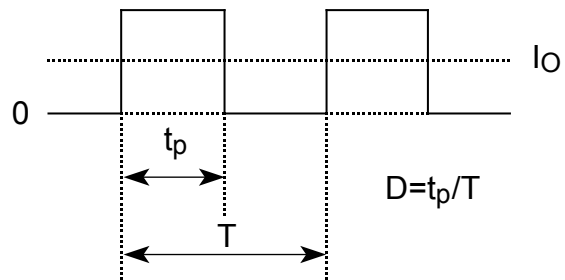
## Forward Voltage



# DE3L20U Forward Power Dissipation

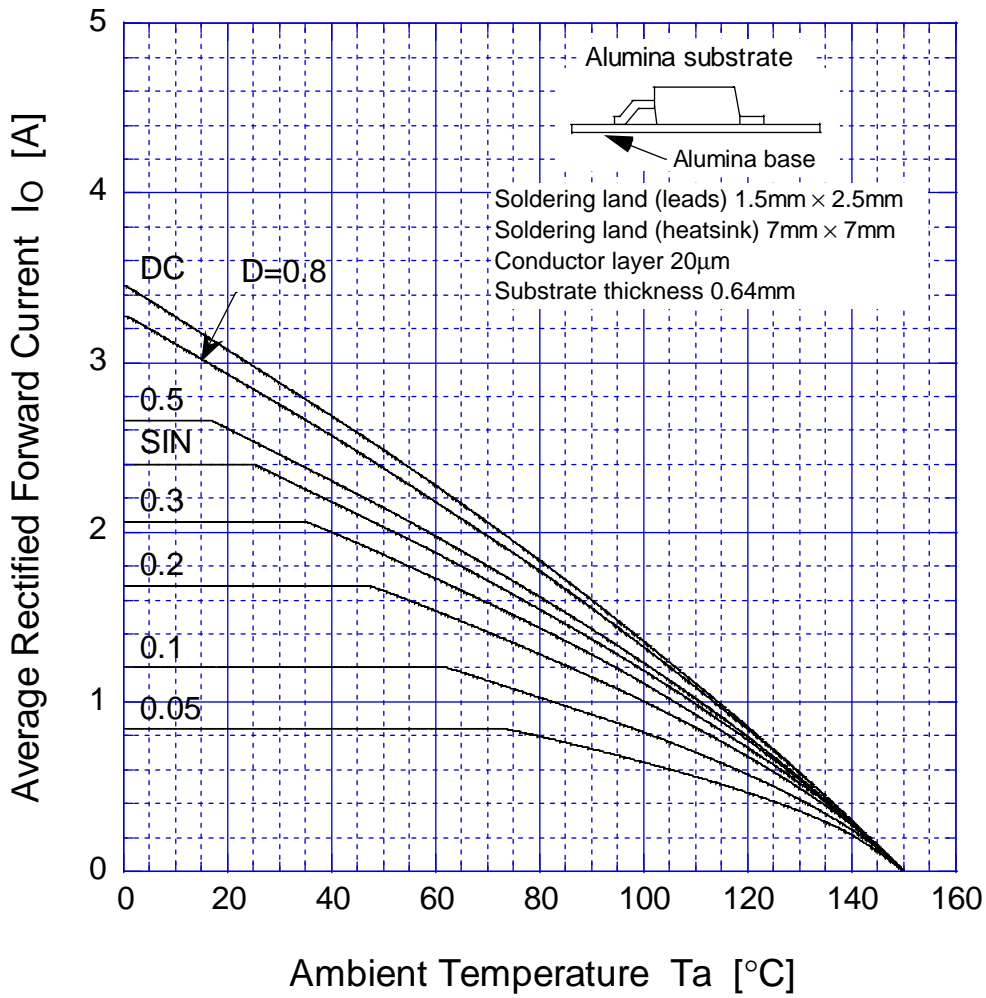


$T_j = 150^\circ\text{C}$

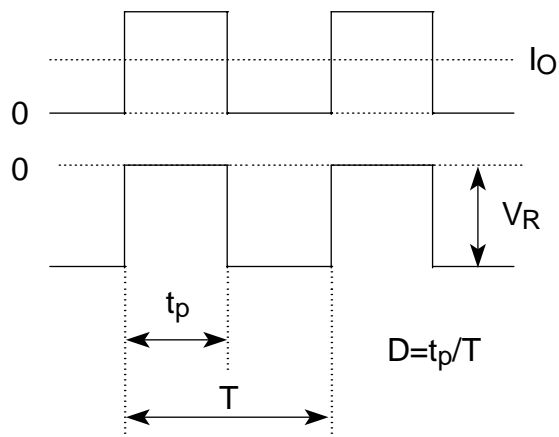


# DE3L20U

# Derating Curve

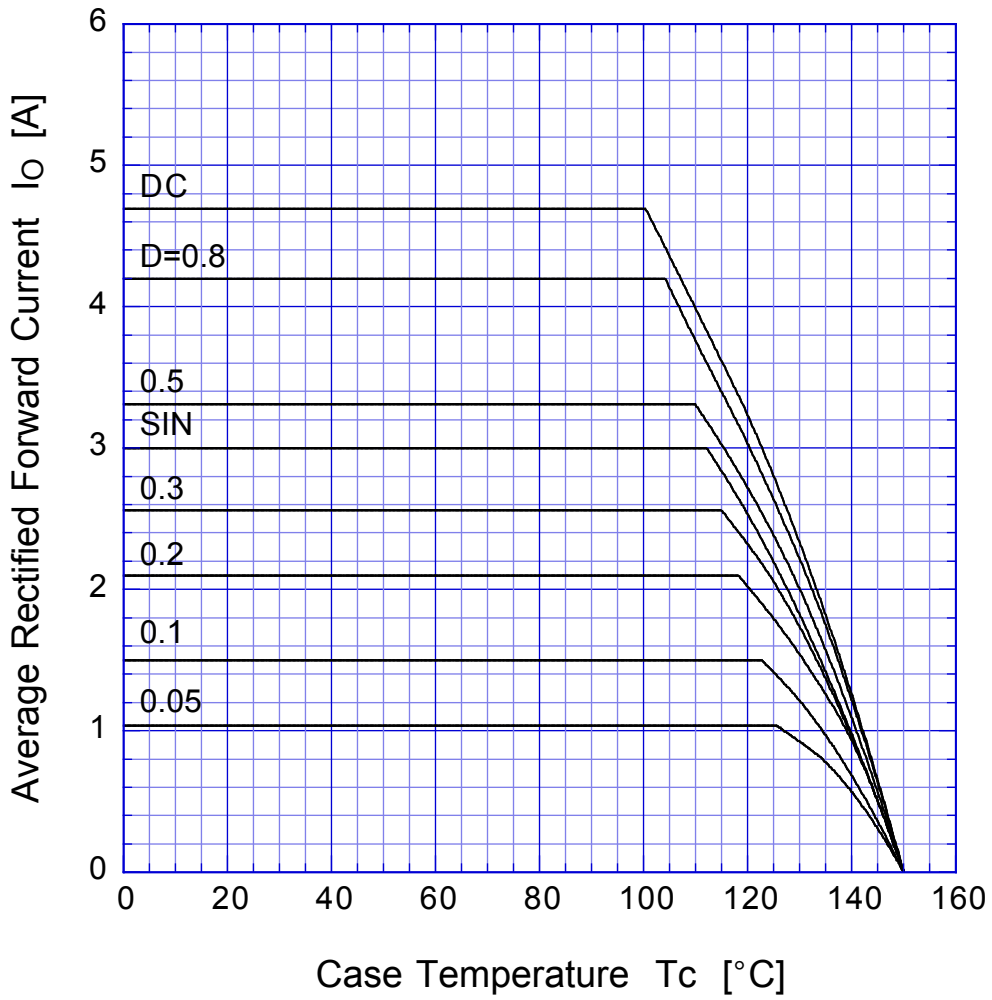


$V_R = 200V$

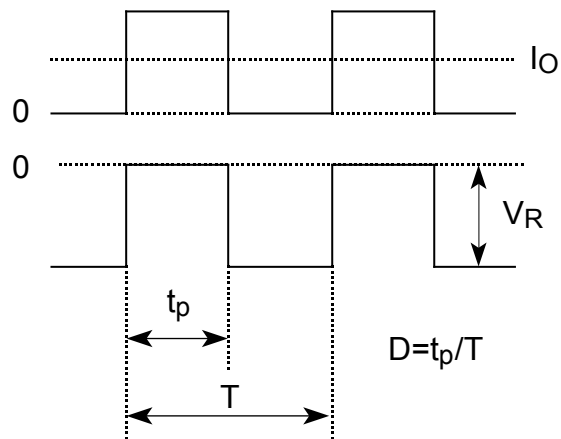


# DE3L20U

# Derating Curve

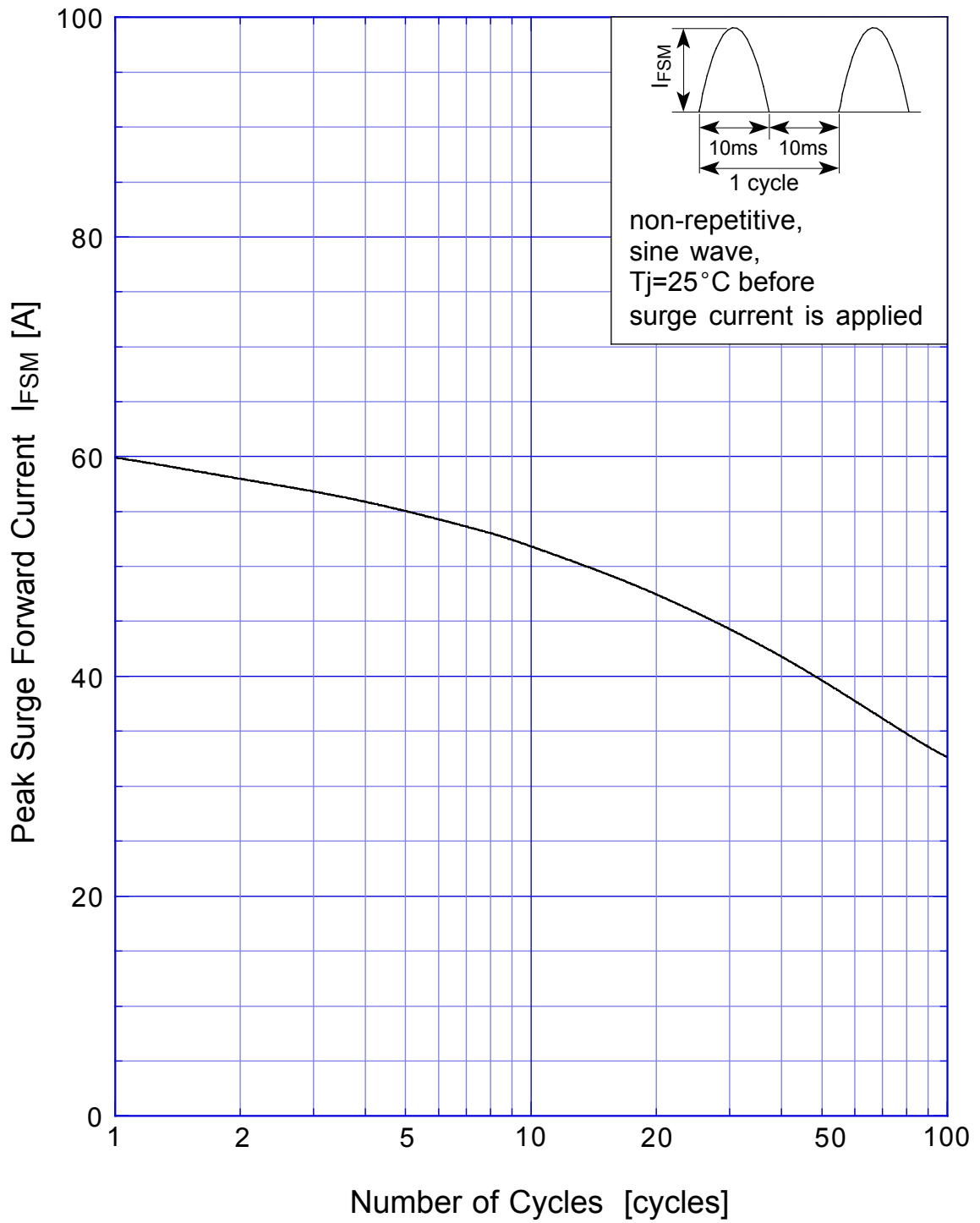


$V_R = 200V$



# DE3L20U

## Peak Surge Forward Capability



# DE3L20U Junction Capacitance

