

# SHINDENGEN

## Super Fast Recovery Rectifiers

Dual

# DE5LC20U

## 200V 5A

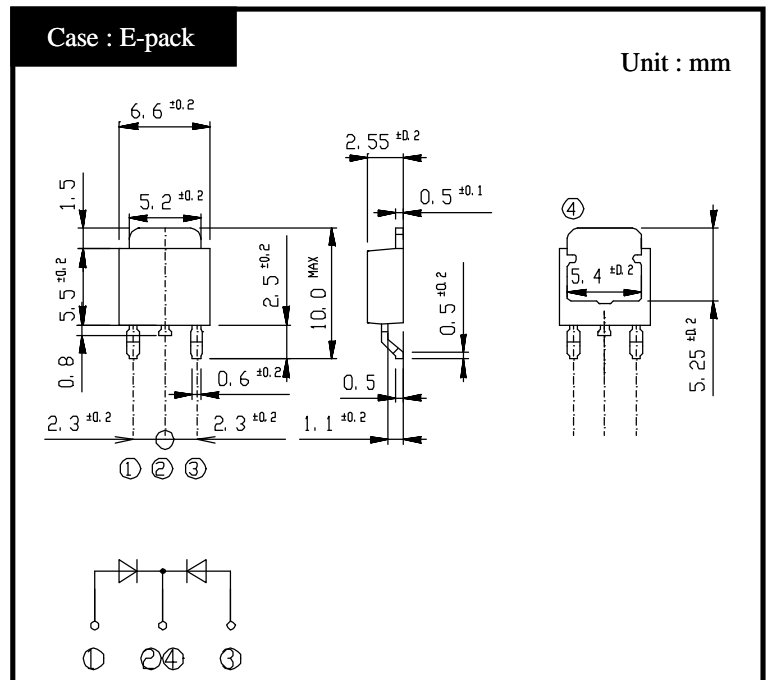
### FEATURES

SMT  
Low noise  
trr35ns

### APPLICATION

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

### OUTLINE DIMENSIONS



### RATINGS

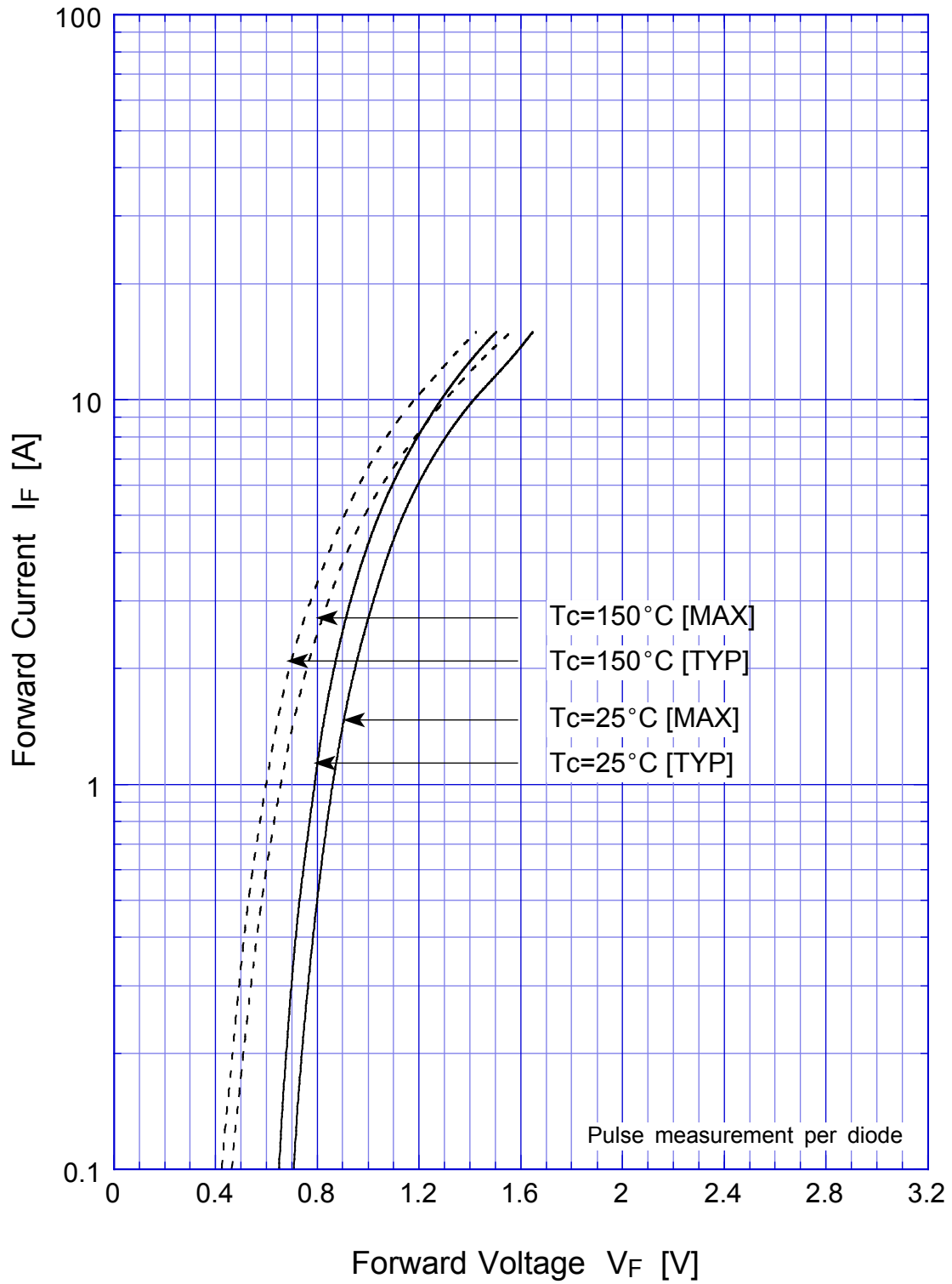
Absolute Maximum Ratings (If not specified Tc=25 )

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-55 ~ 150	
Operating Junction Temperature	T <sub>j</sub>		150	
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, Tc=81	5	A
		50Hz sine wave, R-load, I <sub>o</sub> /2, On alumina substrate Ta=25	2.6	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25	50	A

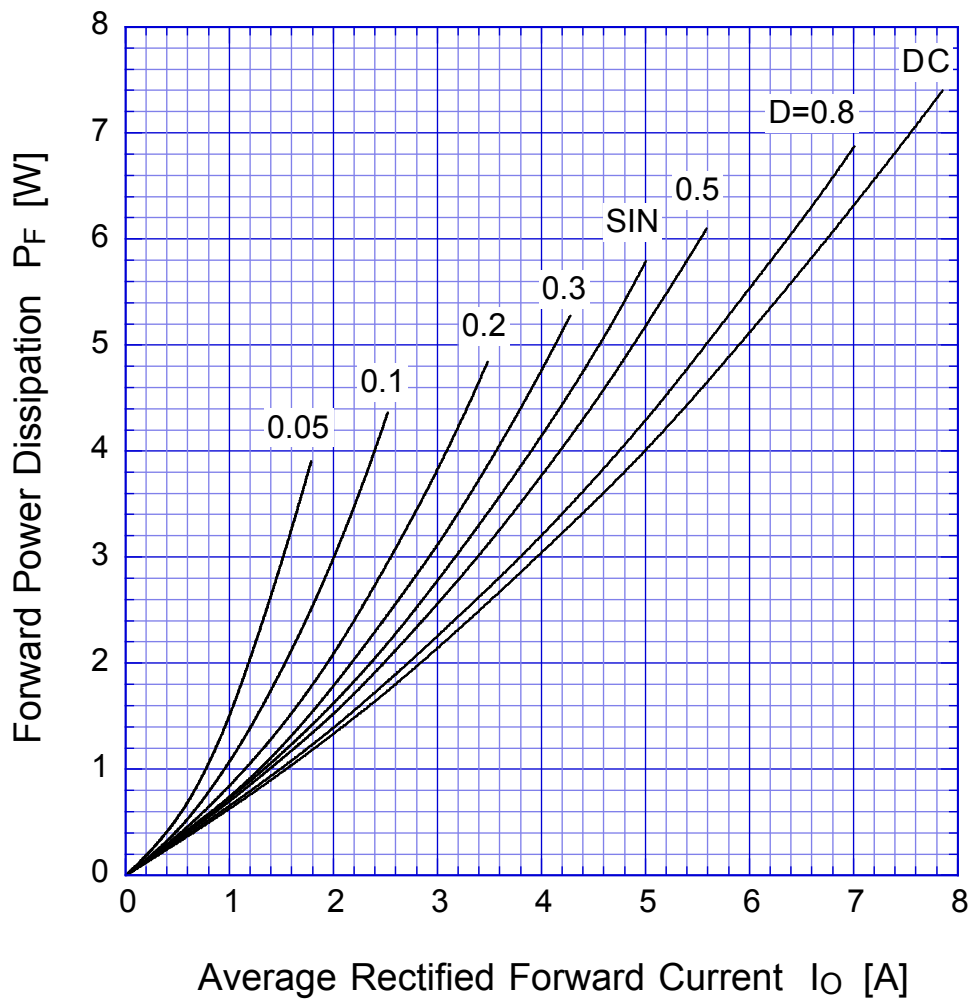
Electrical Characteristics (If not specified Tc=25 )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =2.5A, 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	j <sub>c</sub>	junction to case	Max.12	/W
	j <sub>a</sub>	junction to ambient	Max.55	

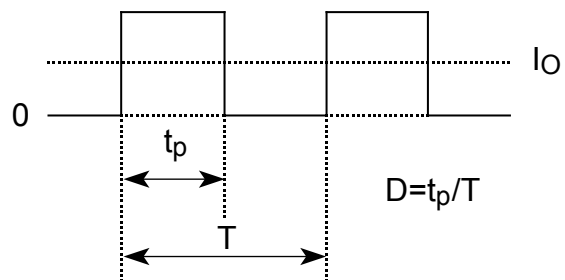
# DE5LC20U Forward Voltage



## DE5LC20U Forward Power Dissipation

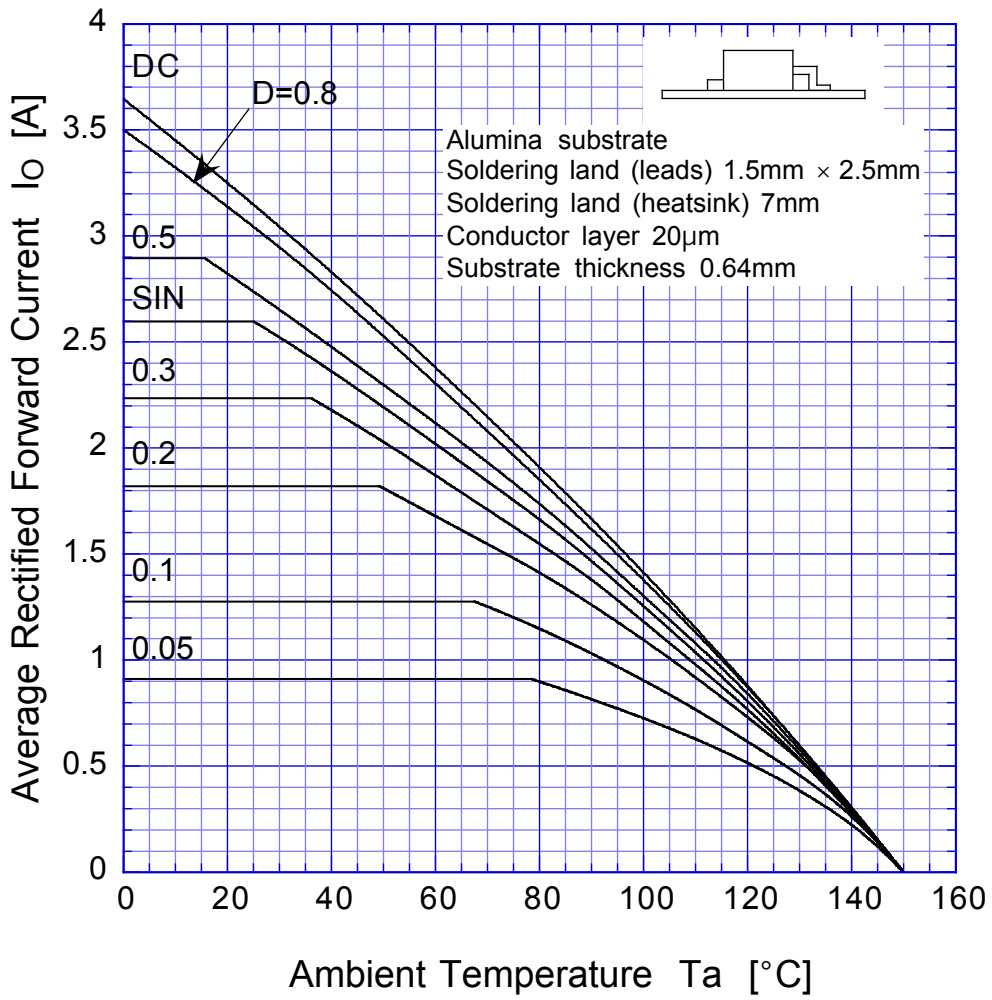


$T_j = T_{jmax}$



# DE5LC20U

# Derating Curve

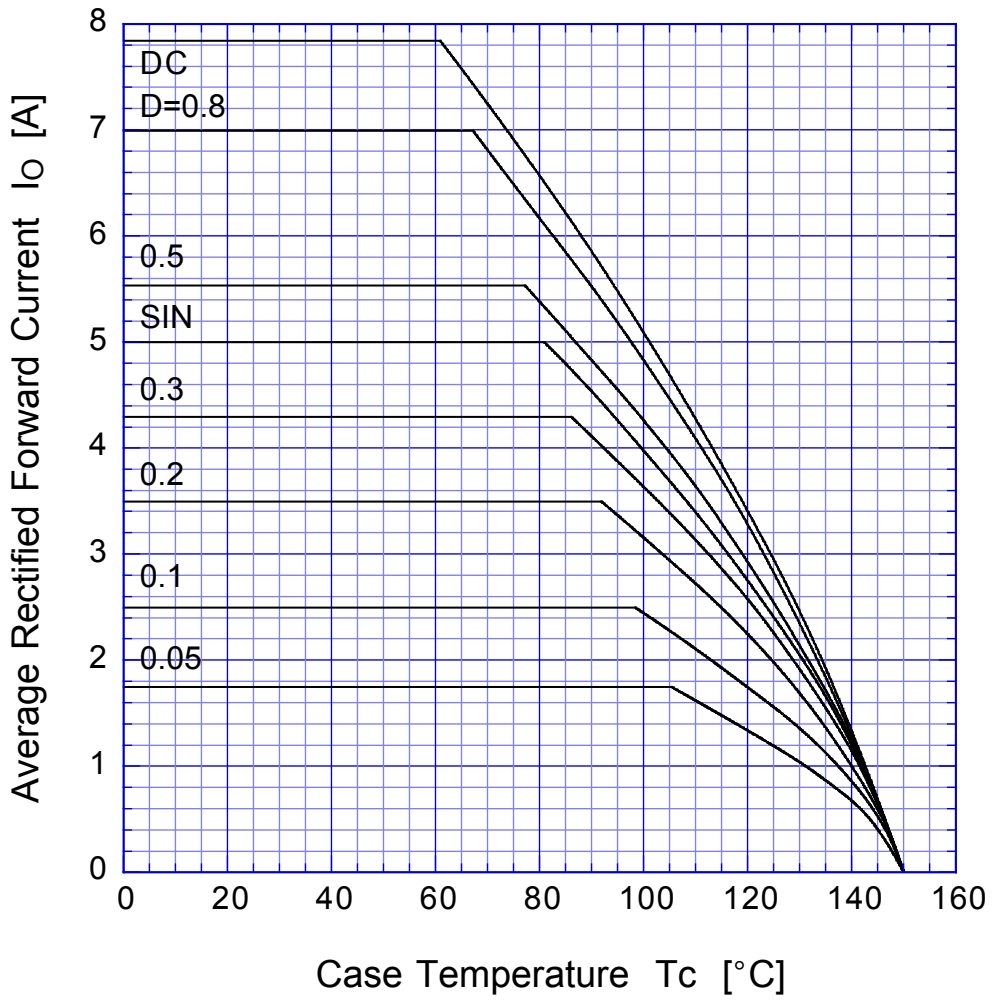


$$V_R = V_{RM}$$

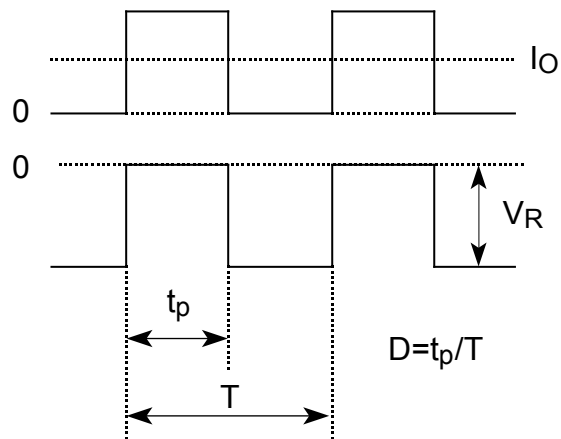


# DE5LC20U

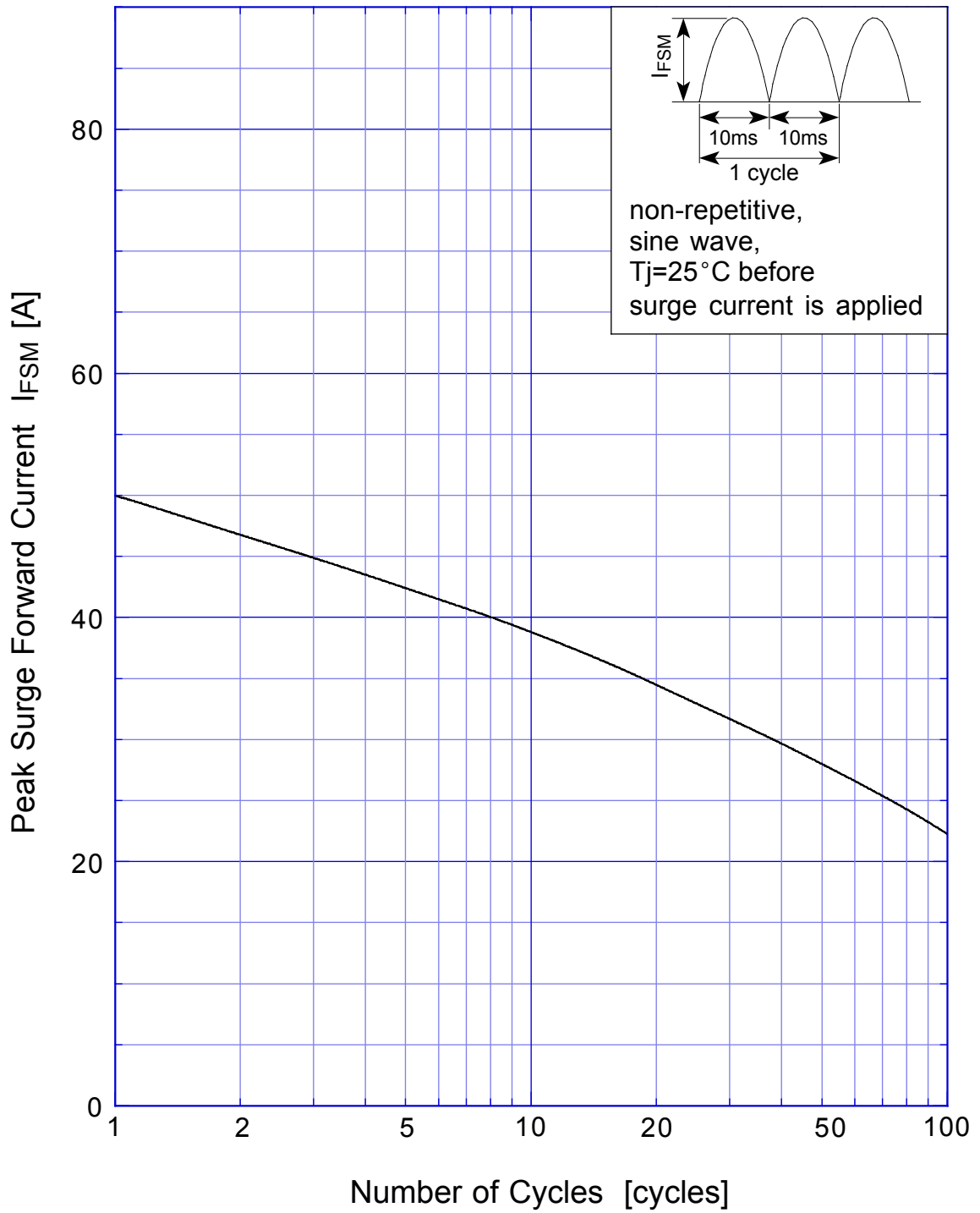
# Derating Curve



$$V_R = V_{RM}$$



# DE5LC20U Peak Surge Forward Capability



# DE5LC20U Junction Capacitance

