

# SHINDENGEN

## Super Fast Recovery Rectifiers

Dual

# DF20LC30

## 300V 20A

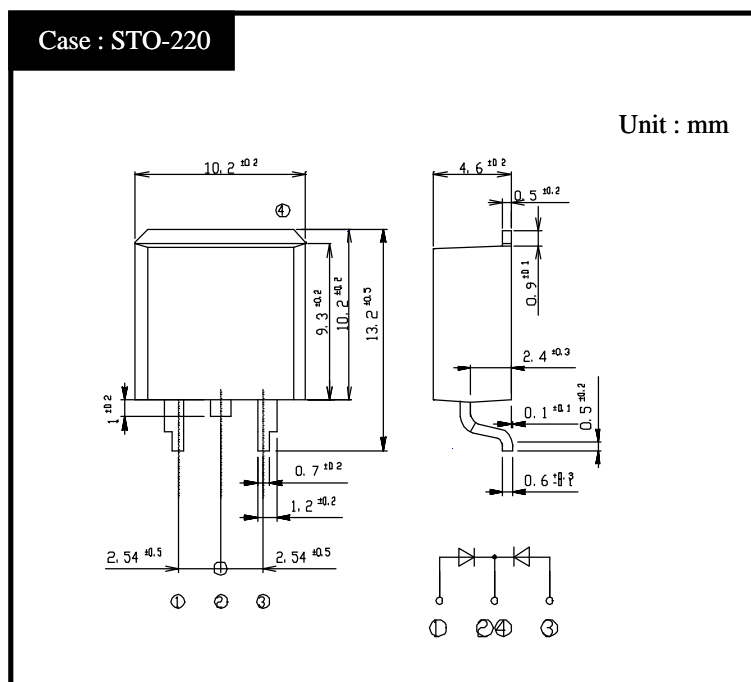
### FEATURES

SMT  
Low noise  
trr30ns

### APPLICATION

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

### OUTLINE DIMENSIONS



### RATINGS

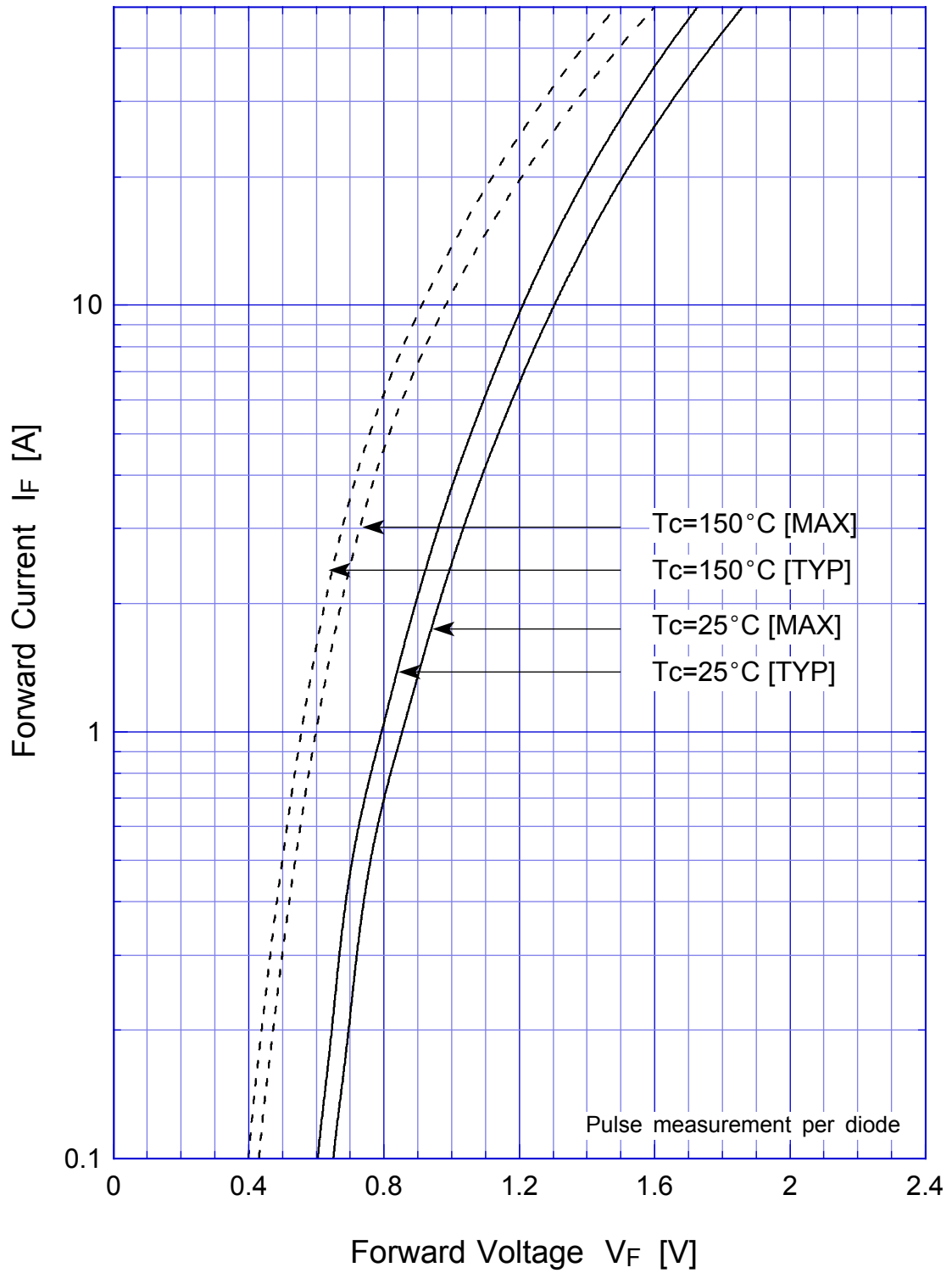
Absolute Maximum Ratings (If not specified  $T_c=25$  )

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-55 ~ 150	
Operating Junction Temperature	$T_j$		150	
Maximum Reverse Voltage	$V_{RM}$		300	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load, Rating for each diode $I_o/2$ , $T_c=124$	20	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25$	180	A

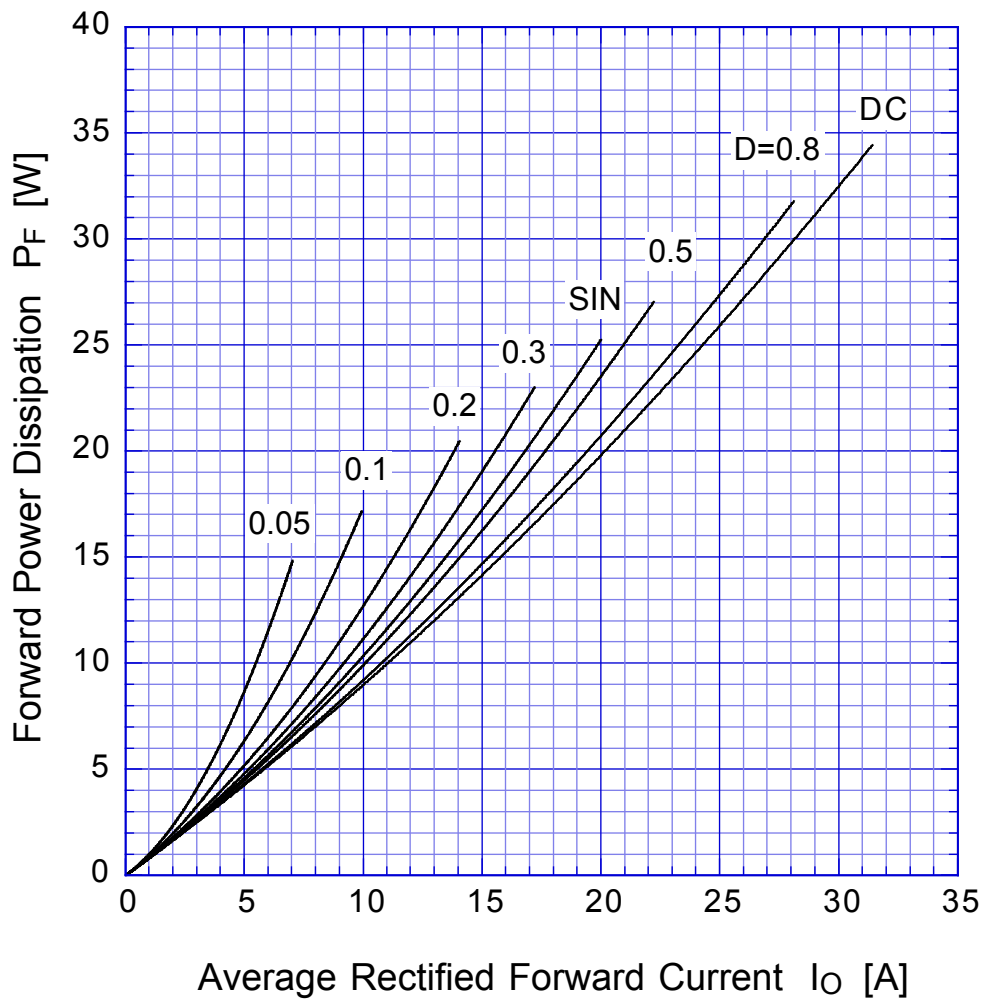
Electrical Characteristics (If not specified  $T_c=25$  )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=10A$ , Pulse measurement, Rating of per diode	Max.1.3	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max.25	$\mu A$
Reverse Recovery Time	trr	$I_F=0.5A$ , $I_R=1A$ , Rating of per diode	Max.30	ns
Junction Capacitance	$C_j$	$f=1MHz$ , $V_R=10V$ , Rating of per diode	TYP 90	pF
Thermal Resistance	$j_c$	junction to case	Max.1.0	/W

# DF20LC30 Forward Voltage



## DF20LC30 Forward Power Dissipation

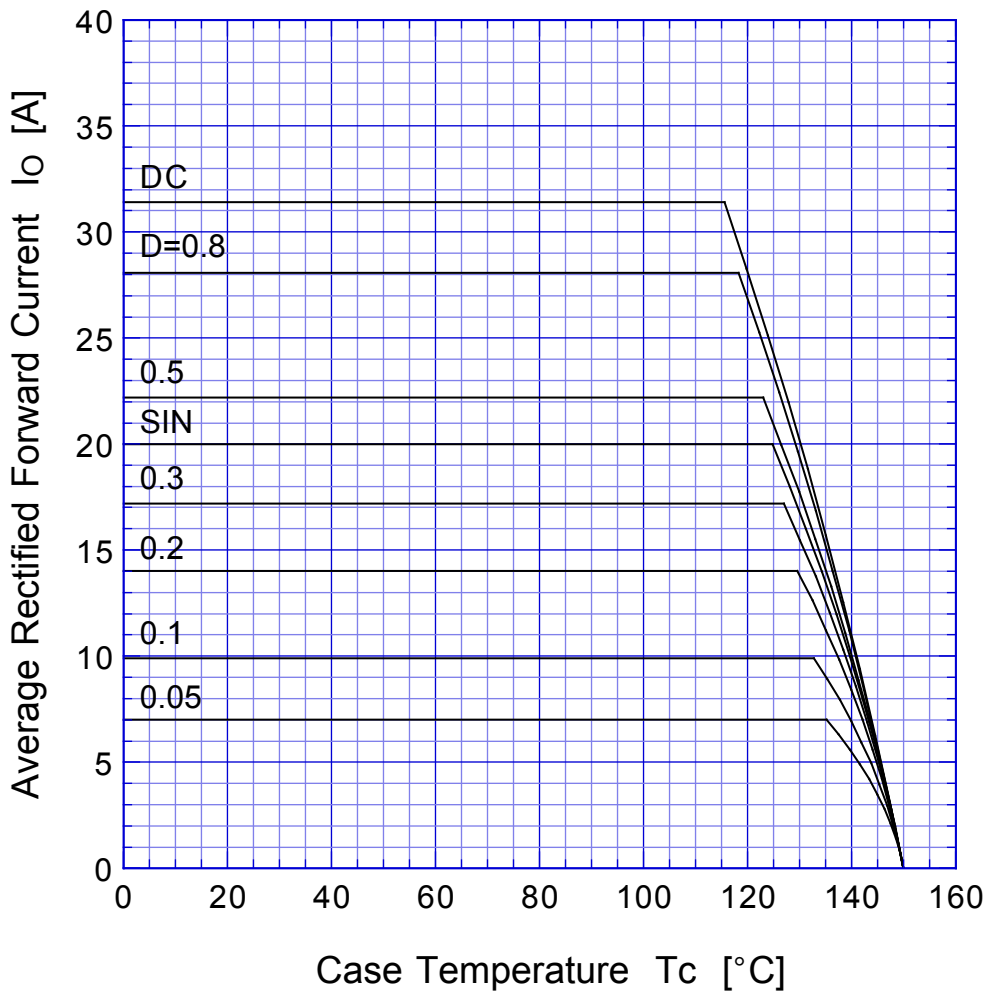


$T_j = 150^\circ\text{C}$



# DF20LC30

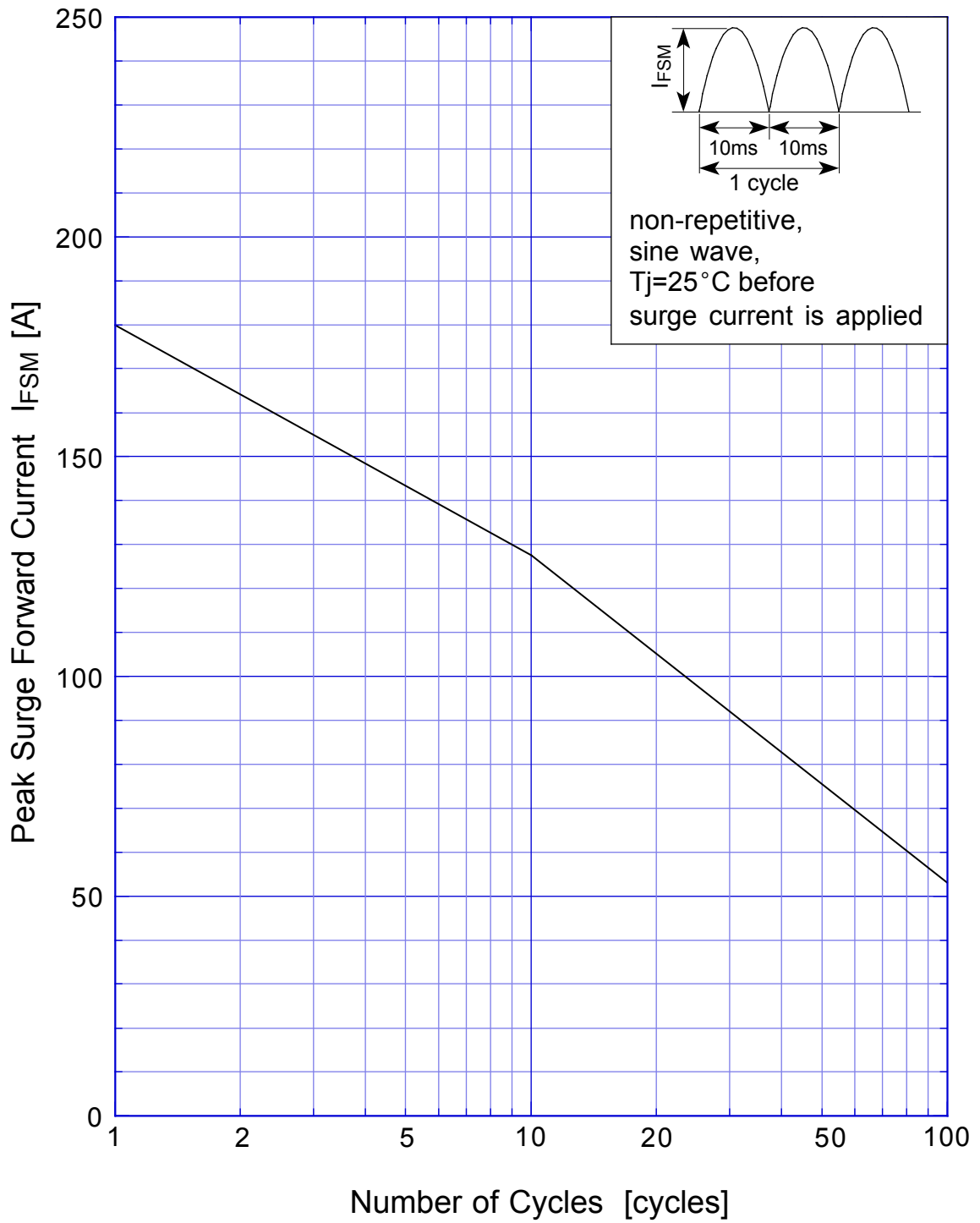
# Derating Curve



$$V_R = V_{RM}$$



# DF20LC30 Peak Surge Forward Capability



# DF20LC30 Junction Capacitance

