

# SHINDENGEN

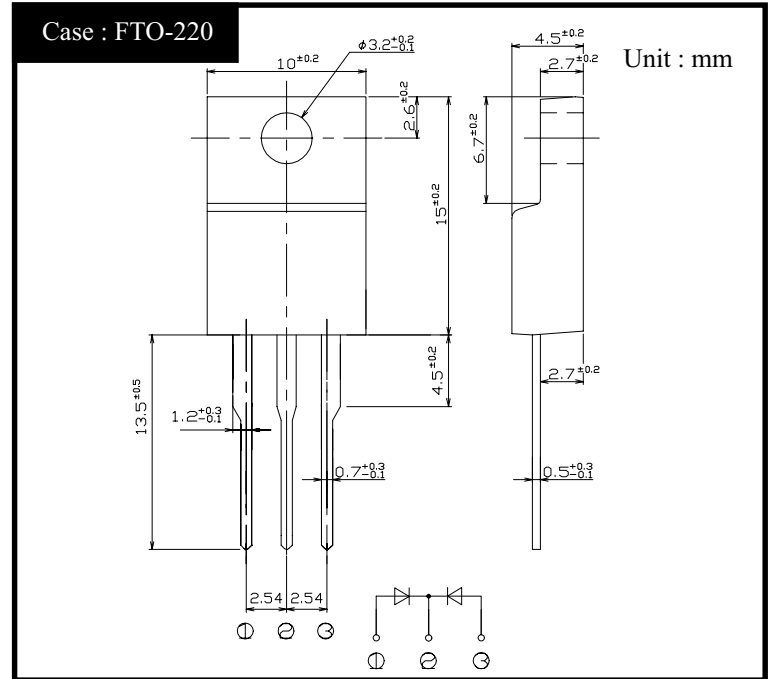
## Super Fast Recovery Rectifiers

Dual

# SF20LC30

## 300V 20A

### OUTLINE DIMENSIONS



### RATINGS

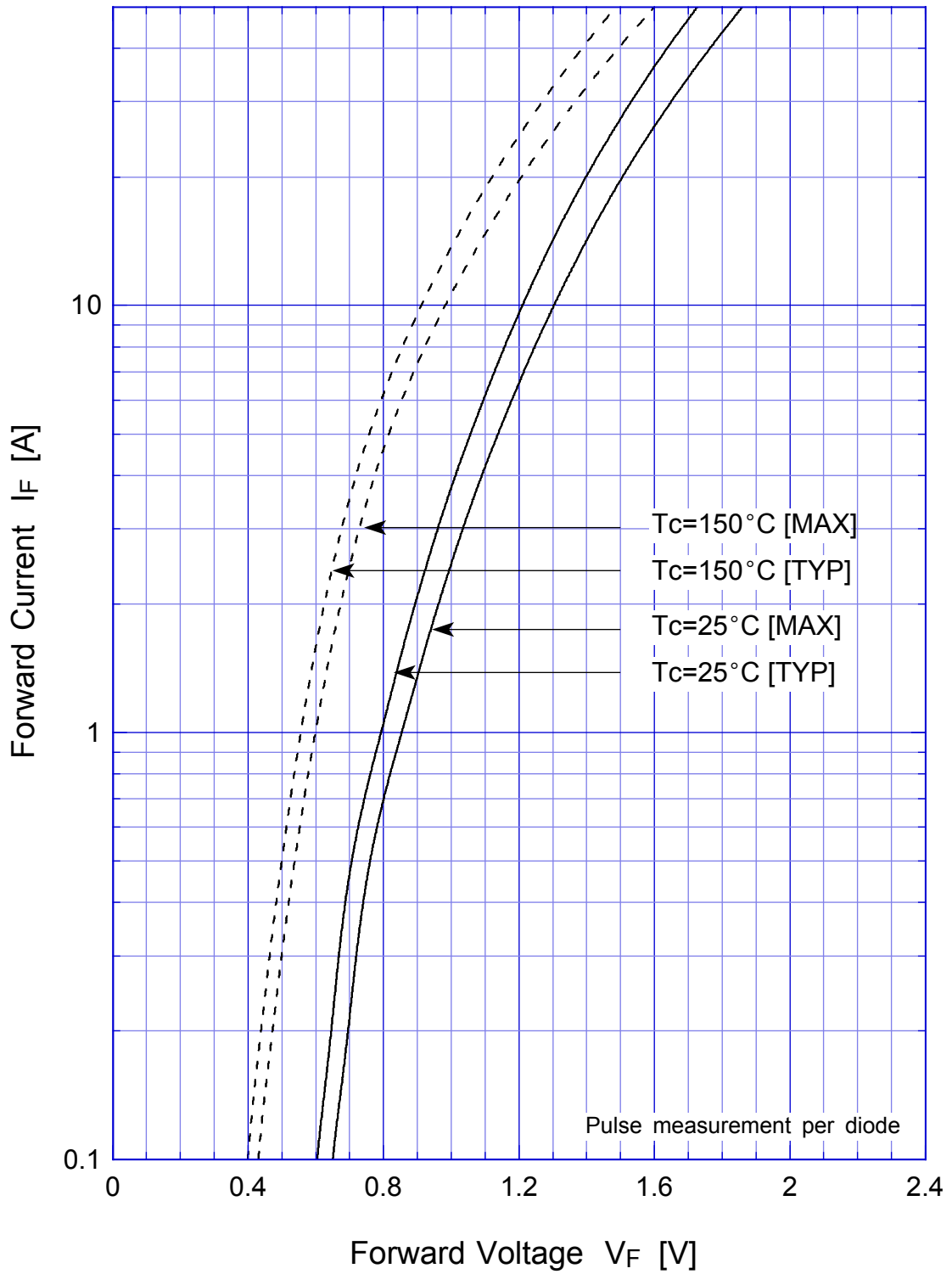
● Absolute Maximum Ratings (If not specified  $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-55~150	$^\circ\text{C}$
Operating Junction Temperature	$T_j$		150	$^\circ\text{C}$
Maximum Reverse Voltage	$V_{RM}$		300	V
Average Rectified Forward Current	$I_o$	50Hz sine wave, R-load, Rating for each diode $I_o/2$ , $T_c=112^\circ\text{C}$	20	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	180	A
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque:0.3N·m)	0.5	N·m

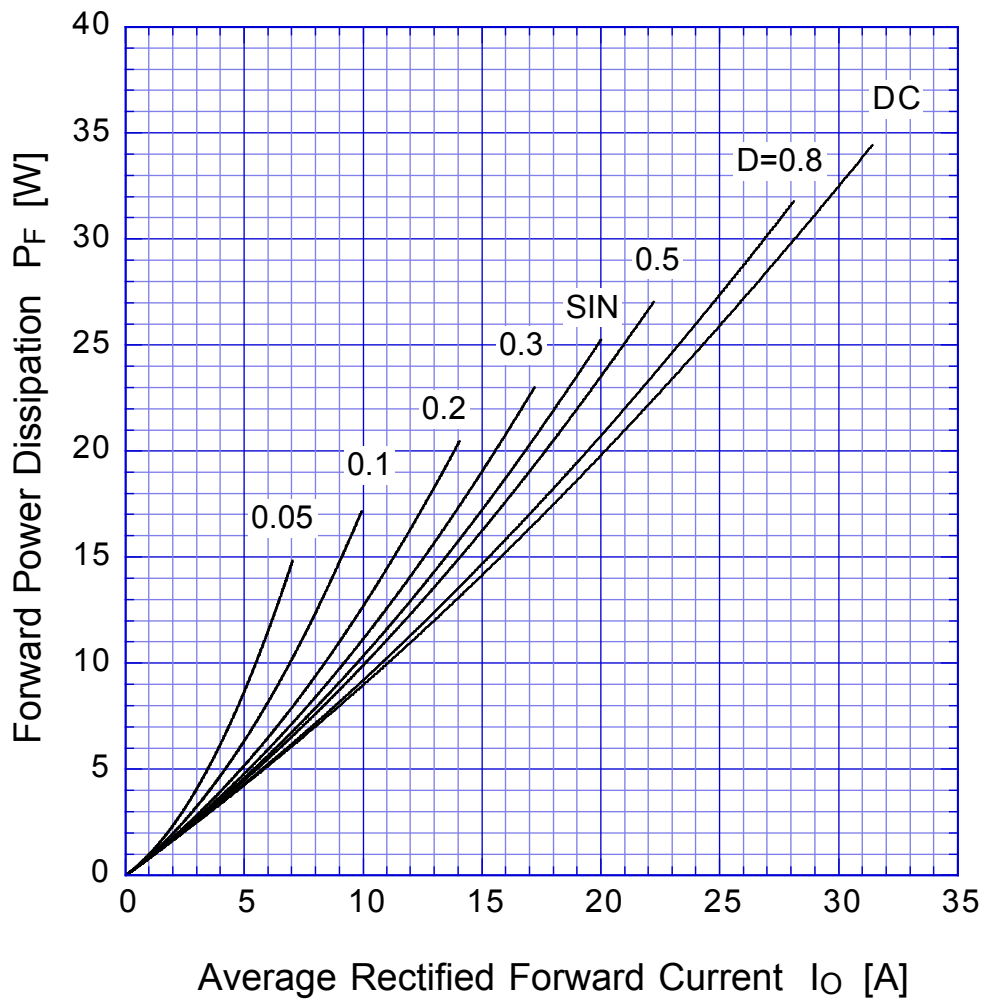
● Electrical Characteristics (If not specified  $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=10\text{A}$ , 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	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$	$I_F=0.5\text{A}$ , $I_R=1\text{A}$ , Rating of per diode	Max.30	ns
Total Gate Charge	$C_J$	$f=1\text{MHz}$ , $V_R=10\text{V}$ , Rating of per diode	Typ.90	pF
Thermal Resistance	$\theta_{jc}$	junction to case	Max.1.5	$^\circ\text{C/W}$

# SF20LC30 Forward Voltage



## SF20LC30 Forward Power Dissipation

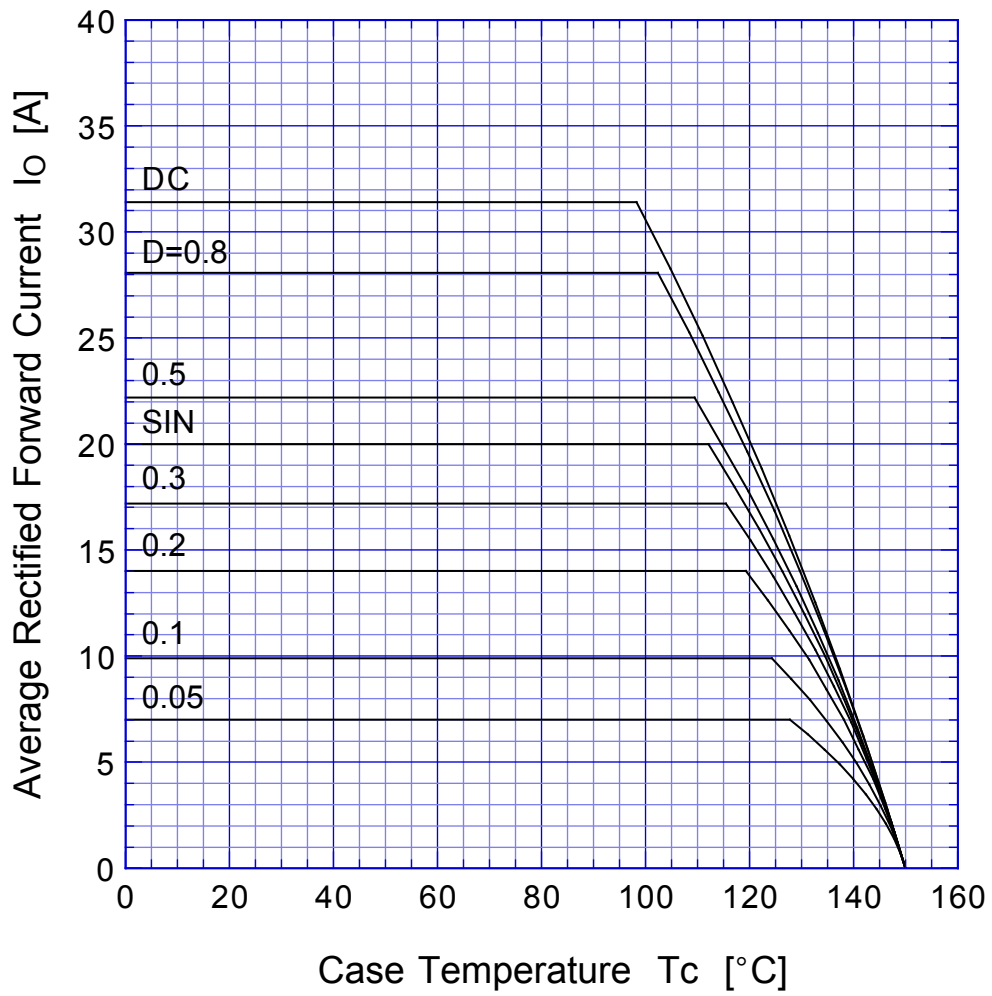


$T_j = 150^\circ\text{C}$



# SF20LC30

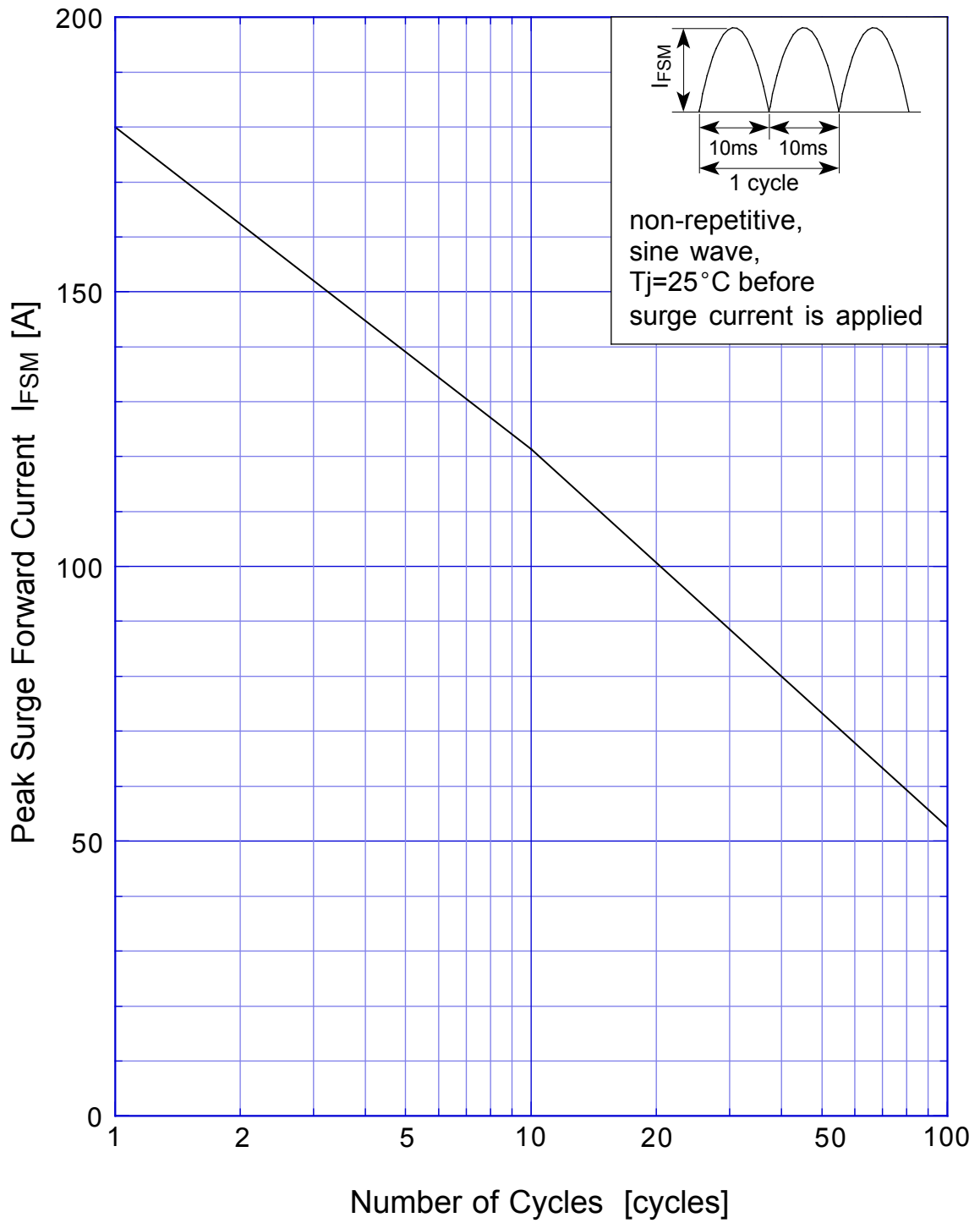
# Derating Curve



$$V_R = V_{RM}$$



# SF20LC30 Peak Surge Forward Capability



# SF20LC30 Junction Capacitance

