

# SHINDENGEN

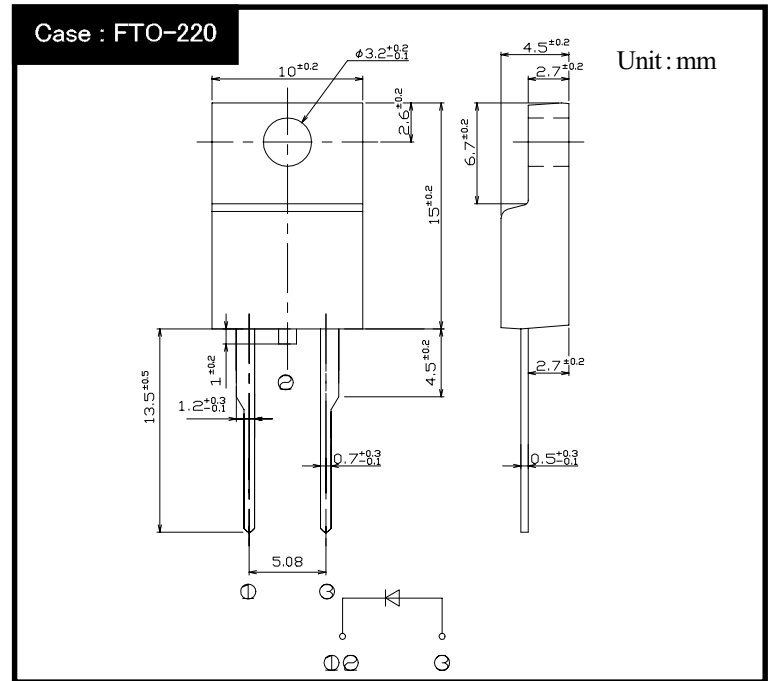
## Super Fast Recovery Rectifiers

Single

# SF20L60U

## 600V 20A

### OUTLINE DIMENSIONS



### RATINGS

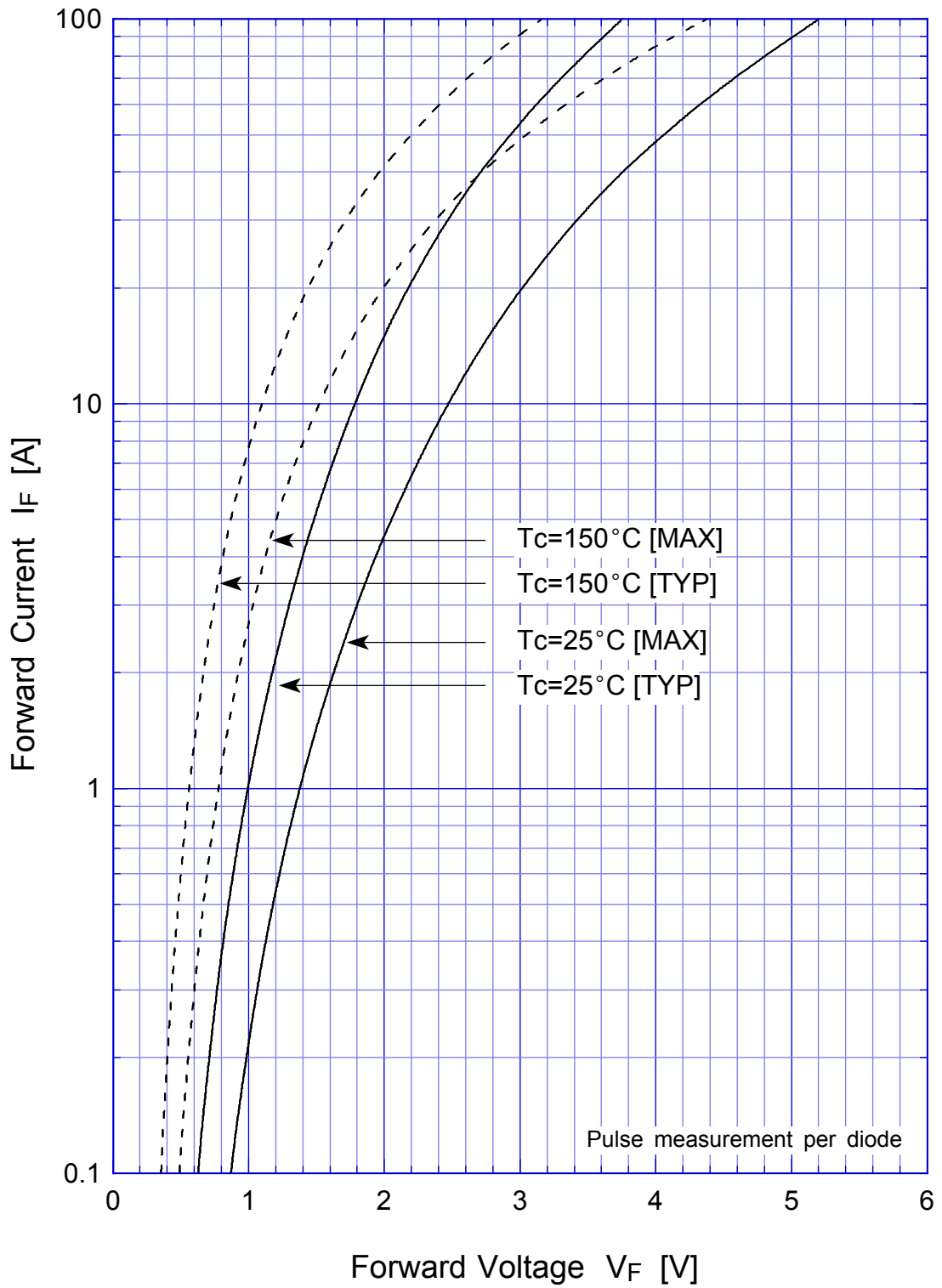
#### ● Absolute Maximum Ratings (If not specified $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-55~150	$^\circ\text{C}$
Operating Junction Temperature	$T_j$		150	$^\circ\text{C}$
Peak Reverse Voltage	$V_{RM}$		600	V
Average Rectified Forward Current	$I_o$	50Hz sine wave, resistance load, $T_c=68^\circ\text{C}$	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)	0.5(0.3)	N·m

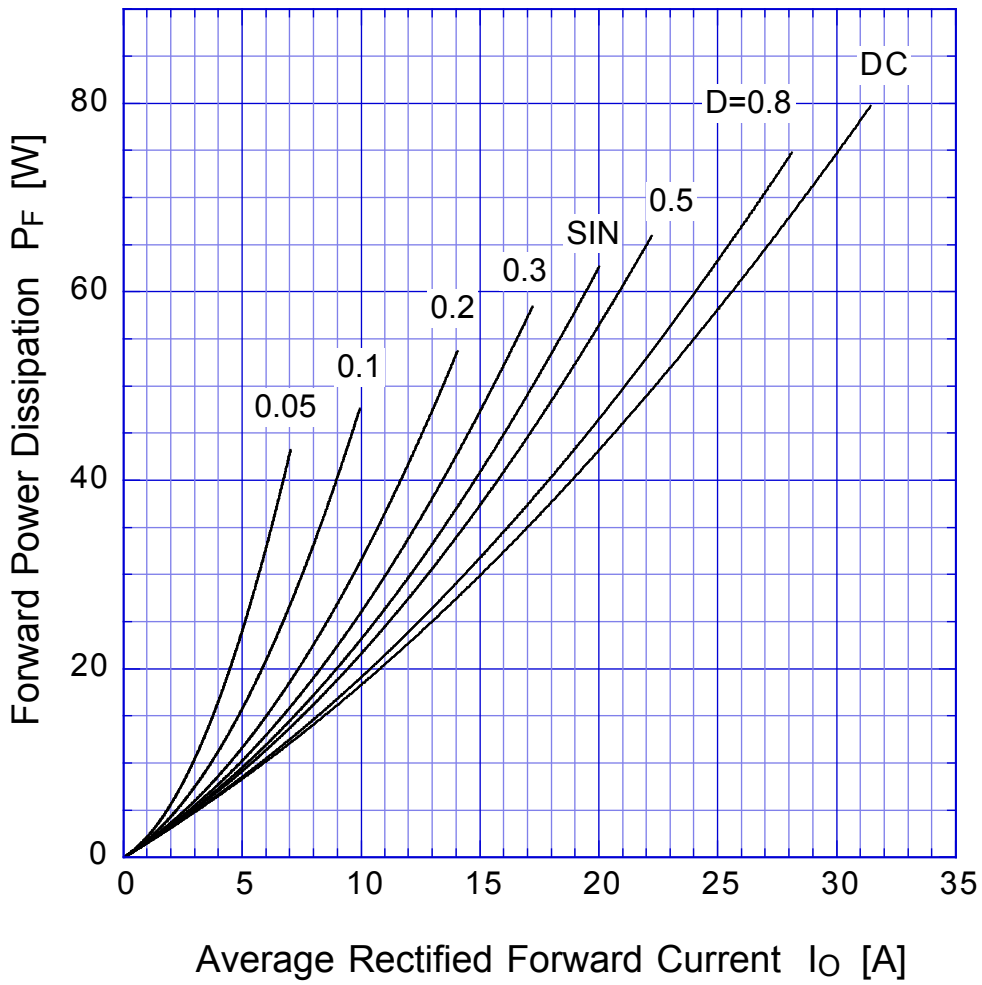
#### ● Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=20\text{A}$ , Pulse measurement	Max.3.0	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement	Max.25	$\mu\text{A}$
Junction Capacitance	$C_j$	$f=1\text{MHz}$ , $V_R=10\text{V}$	Typ.105	pF
Reverse Recovery Time	$t_{rr}$	$I_F=0.5\text{A}$ , $I_R=1\text{A}$	Max.35	ns
Thermal Resistance	$\theta_{jc}$	junction to case	Max.1.3	$^\circ\text{C}/\text{W}$

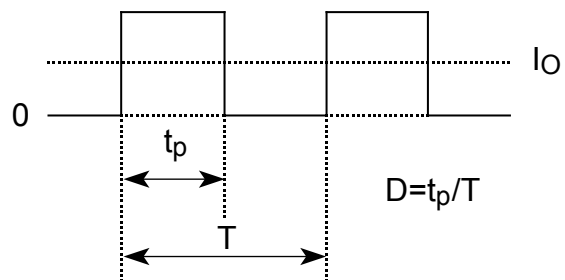
# SF20L60U Forward Voltage



# SF20L60U Forward Power Dissipation

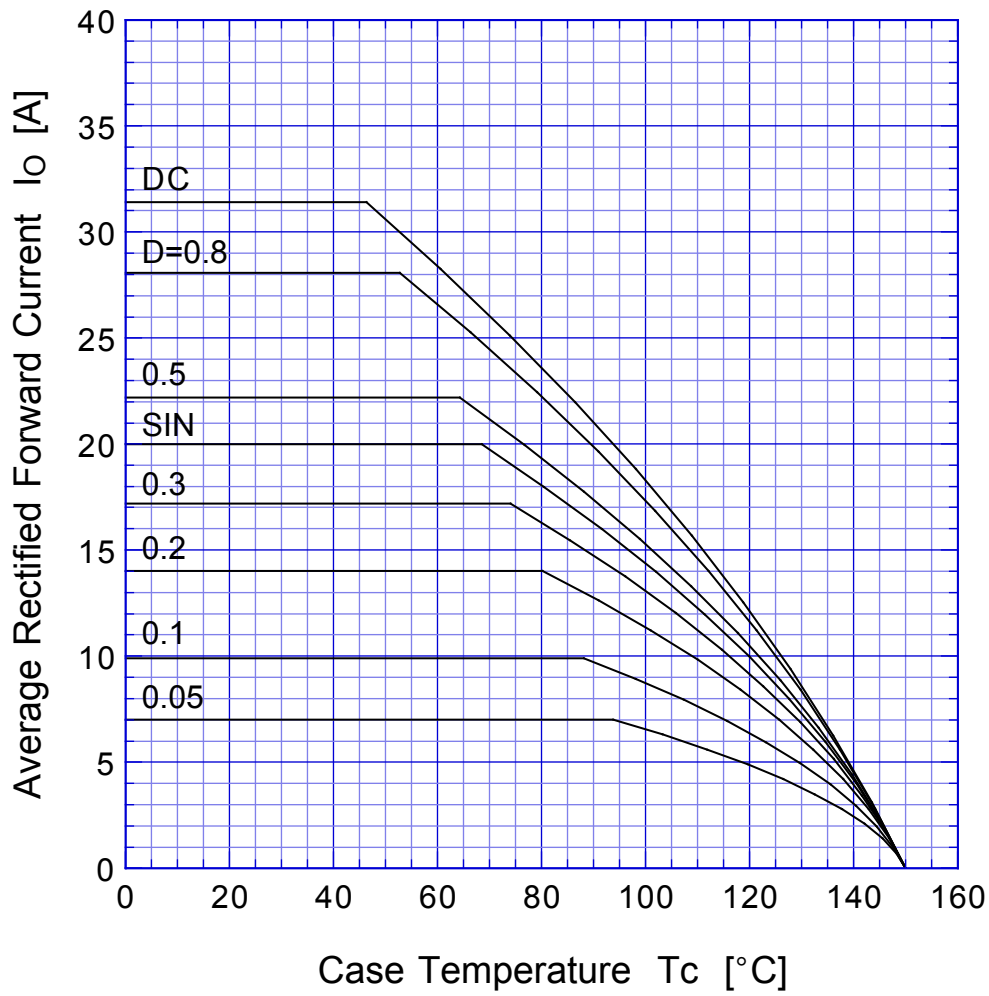


$T_j = 150^\circ\text{C}$



# SF20L60U

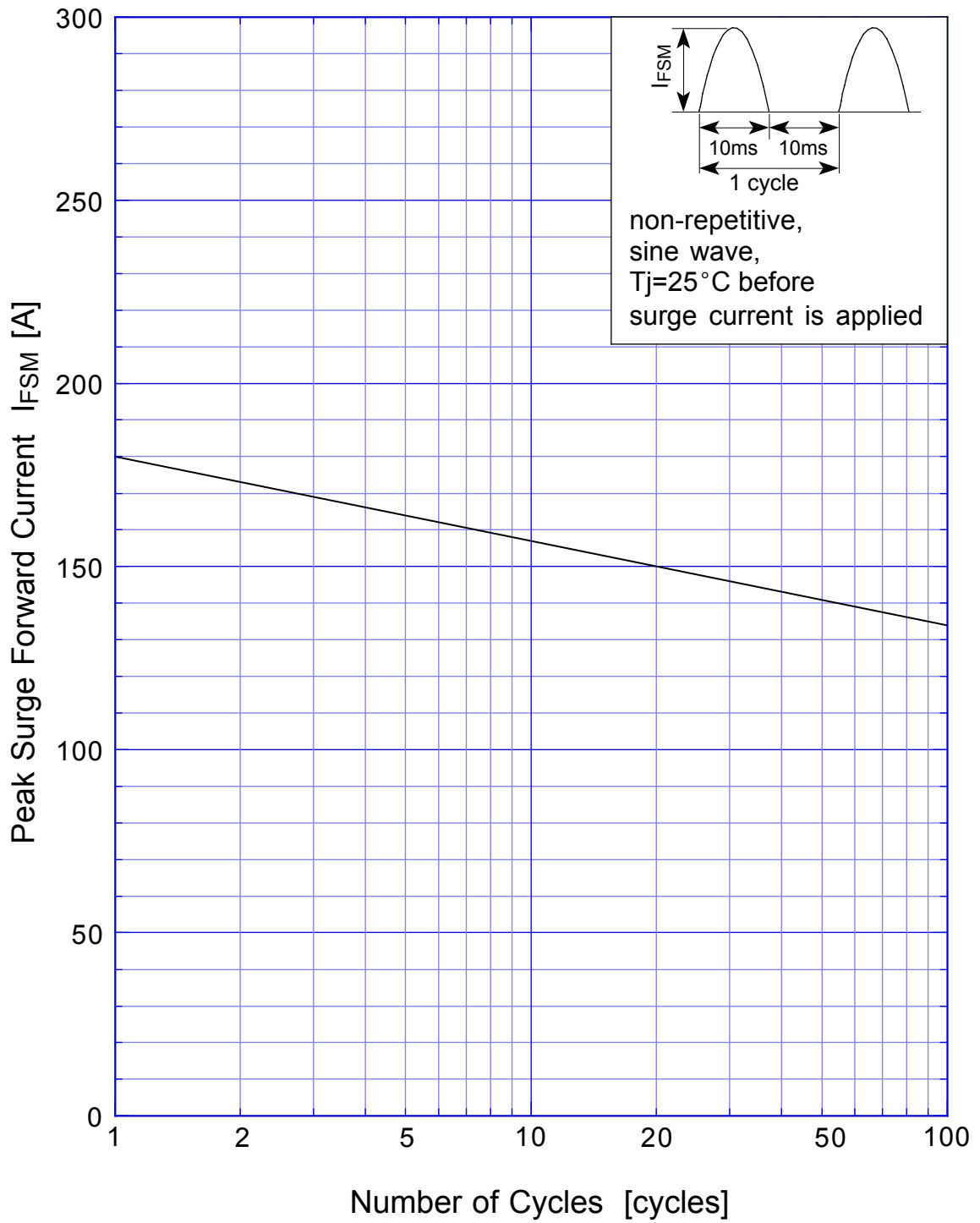
# Derating Curve



$$V_R = V_{RM}$$



# SF20L60U Peak Surge Forward Capability



# SF20L60U Junction Capacitance

