

SHINDENGEN

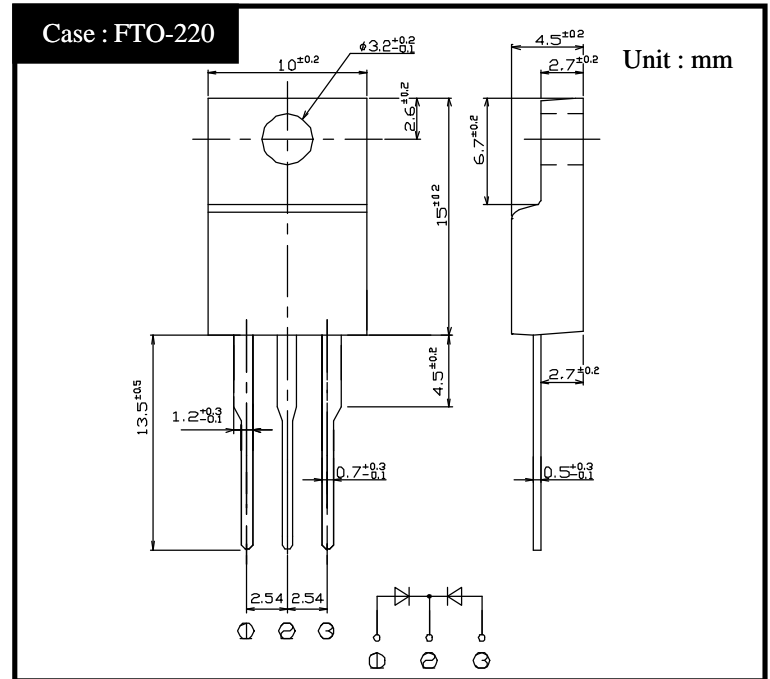
Super Fast Recovery Rectifiers

Dual

SF20LC30

300V 20A

OUTLINE DIMENSIONS



RATINGS

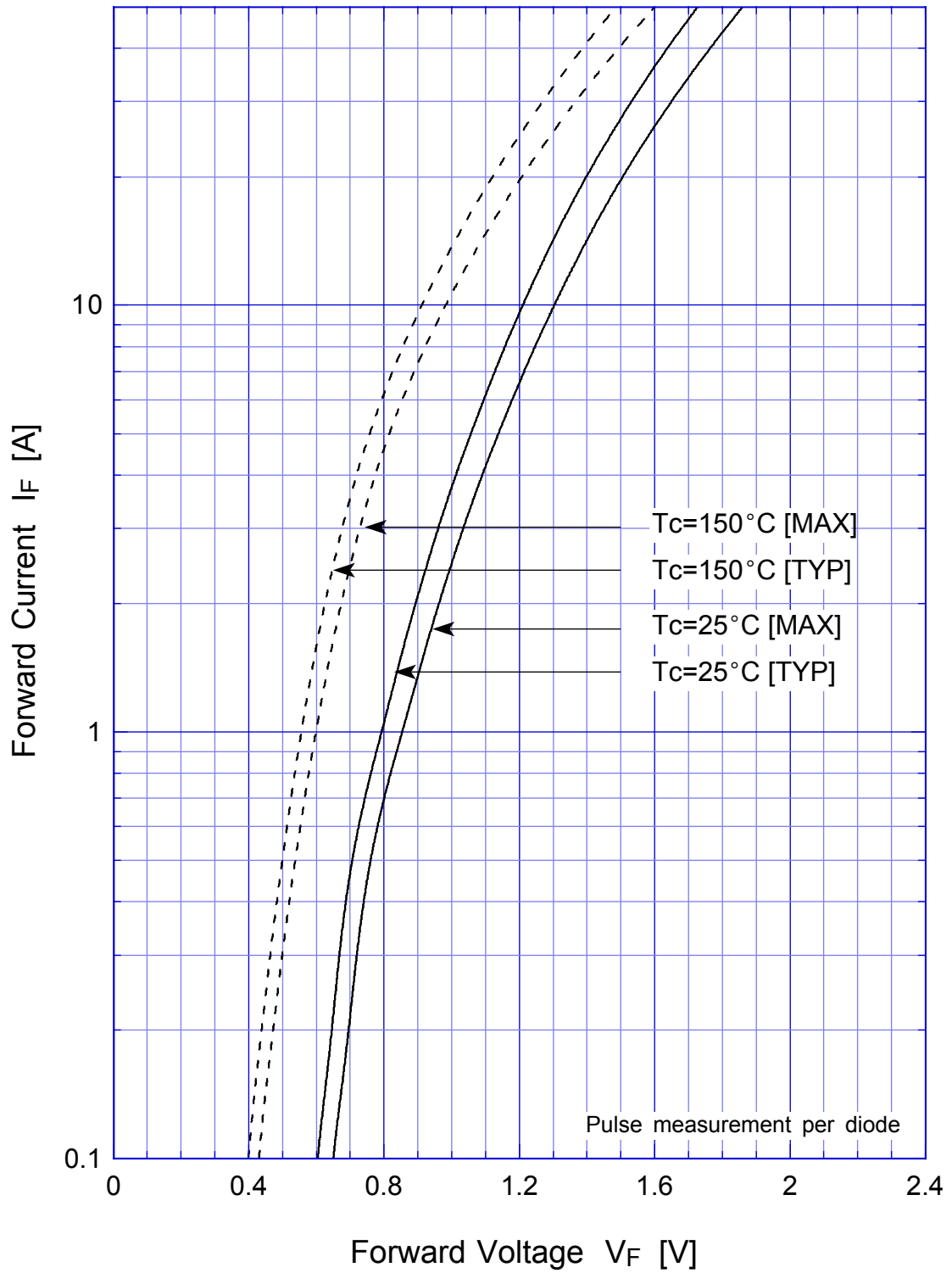
Absolute Maximum Ratings (If not specified $T_c=25$)

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 $I_o/2$, $T_c=112$	20	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25$	180	A
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque $\phi 0.3N \cdot m$)	0.5	$N \cdot m$

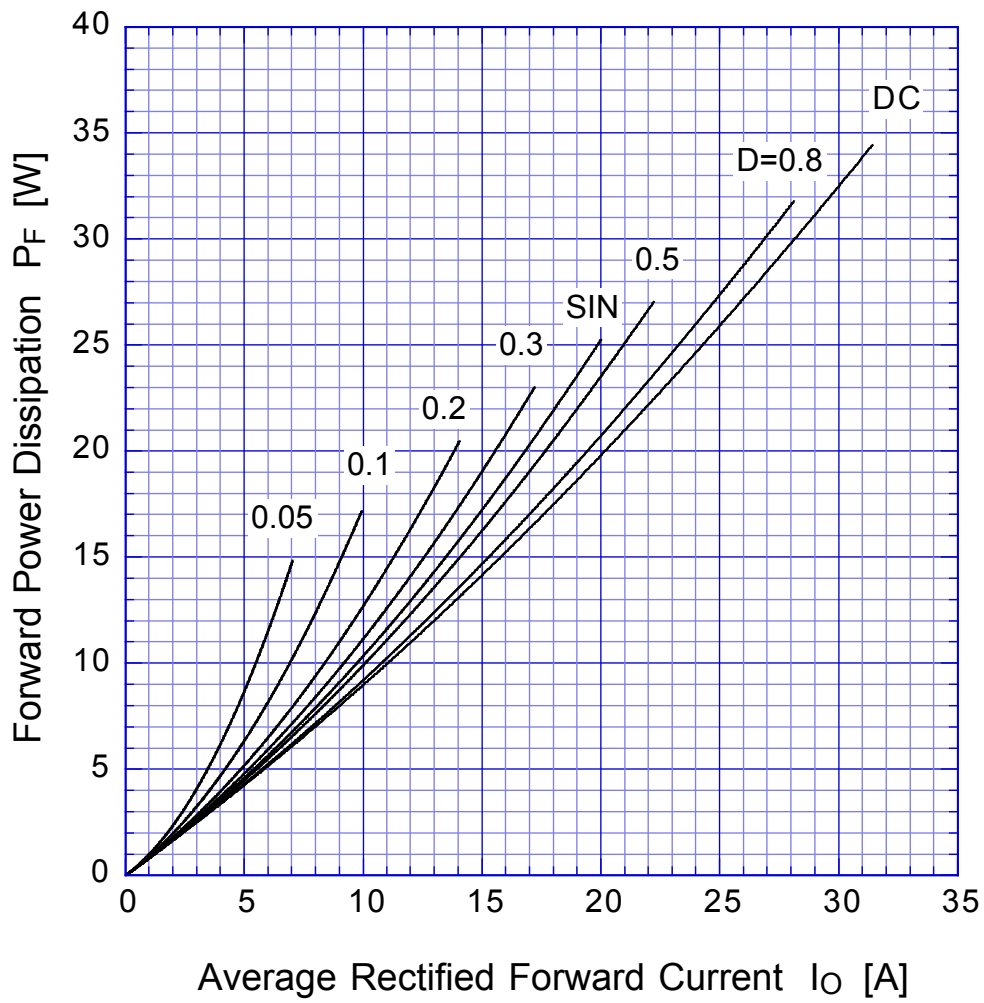
Electrical Characteristics (If not specified $T_c=25$)

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	μA
Reverse Recovery Time	t_{rr}	$I_F=0.5A$, $I_R=1A$, Rating of per diode	Max.30	ns
Total Gate Charge	C_J	$f=1MHz$, $V_R=10V$, Rating of per diode	Typ.90	pF
Thermal Resistance	θ_{jc}	junction to case	Max.1.5	/W

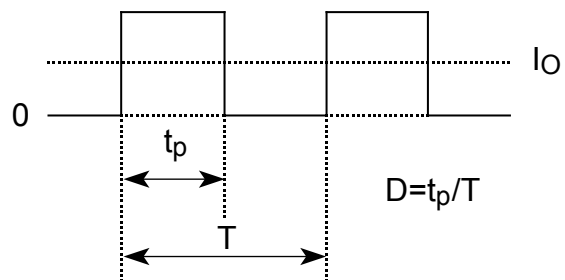
SF20LC30 Forward Voltage



SF20LC30 Forward Power Dissipation

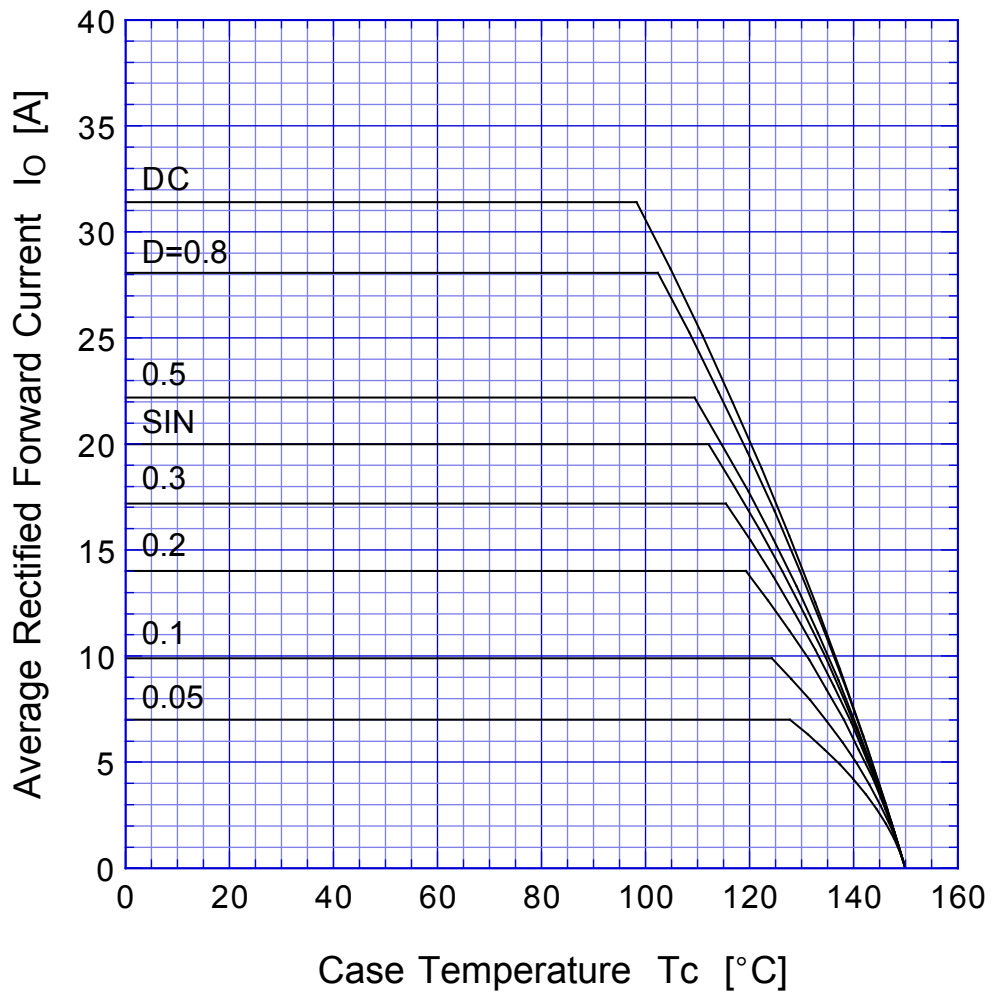


$T_j = 150^\circ\text{C}$



SF20LC30

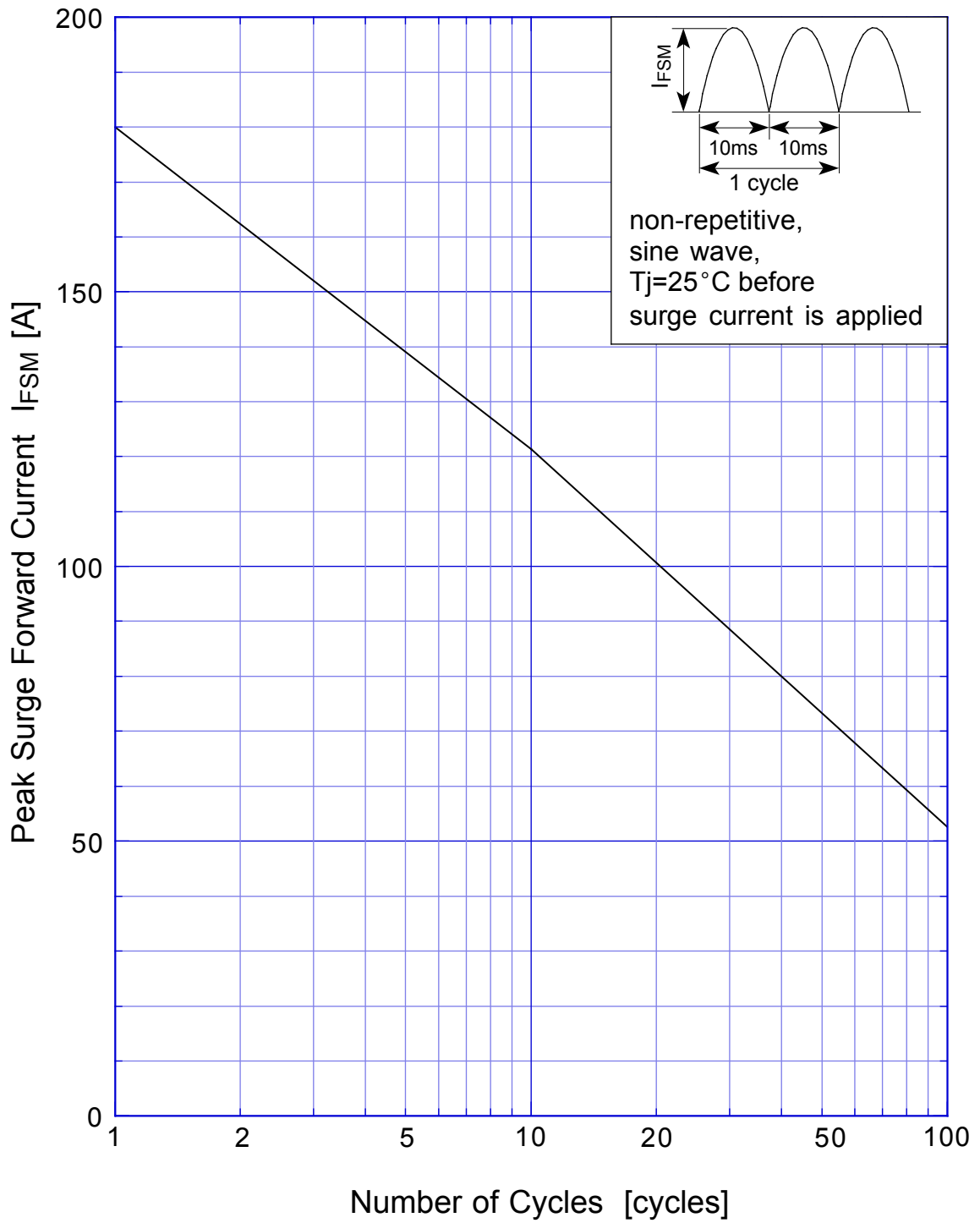
Derating Curve



$$V_R = V_{RM}$$



SF20LC30 Peak Surge Forward Capability



SF20LC30 Junction Capacitance

