

SHINDENGEN

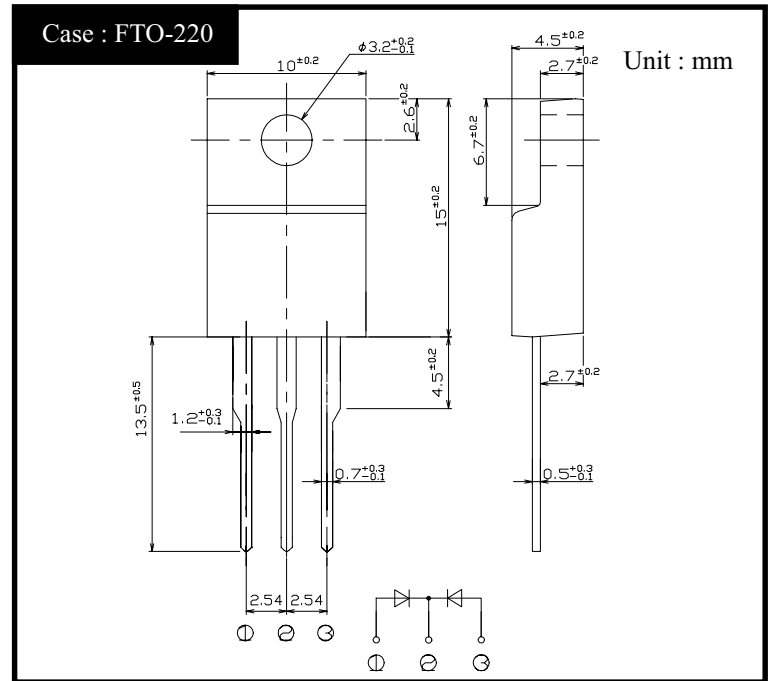
Super Fast Recovery Rectifiers

Dual

SF20LC30

300V 20A

OUTLINE DIMENSIONS



RATINGS

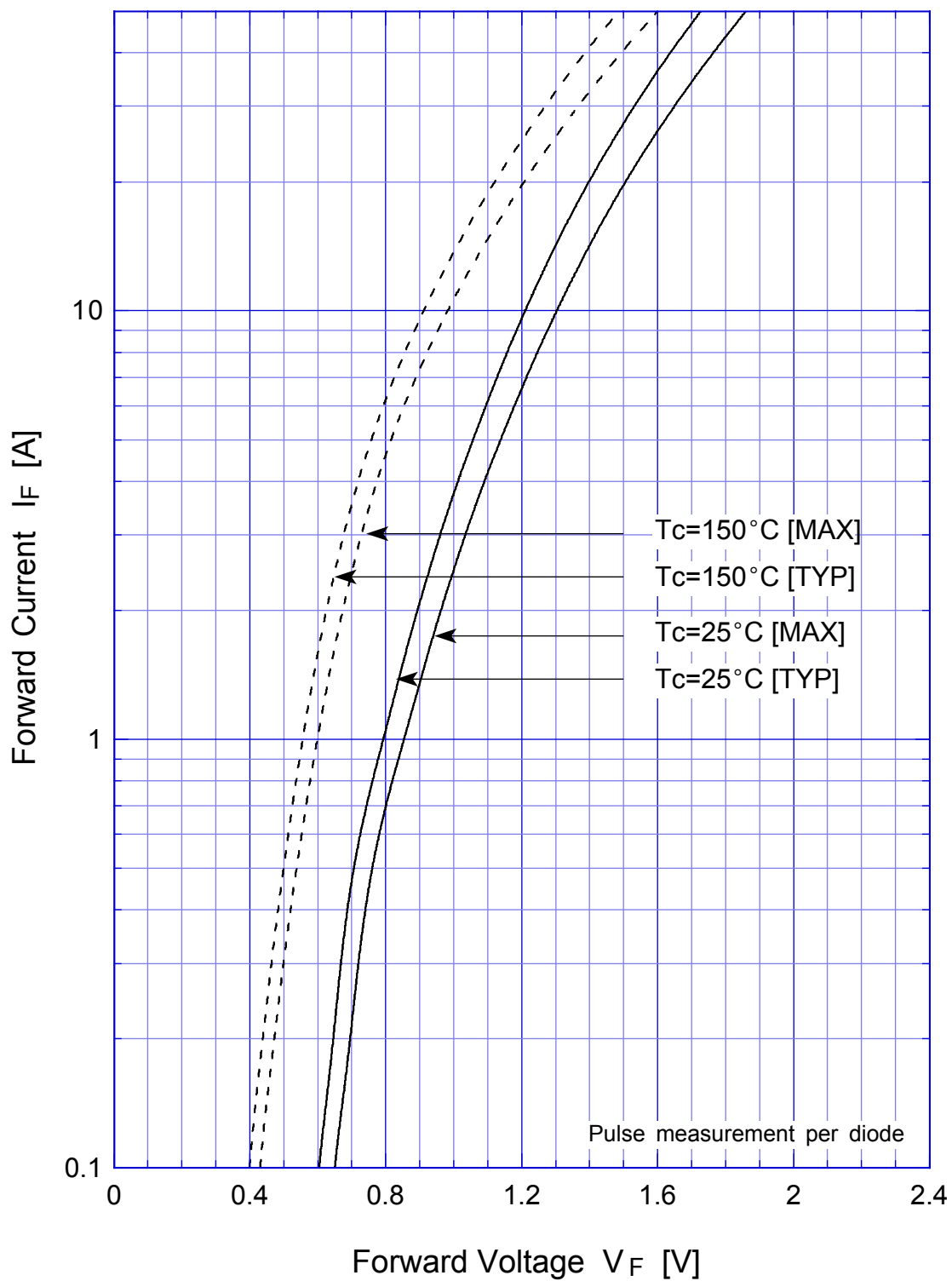
● Absolute Maximum Ratings (If not specified $T_c=25^\circ\text{C}$)

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	2k	V
Mounting Torque	TOR	(Recommended torque: 0.3N·m)	0.5	N·m

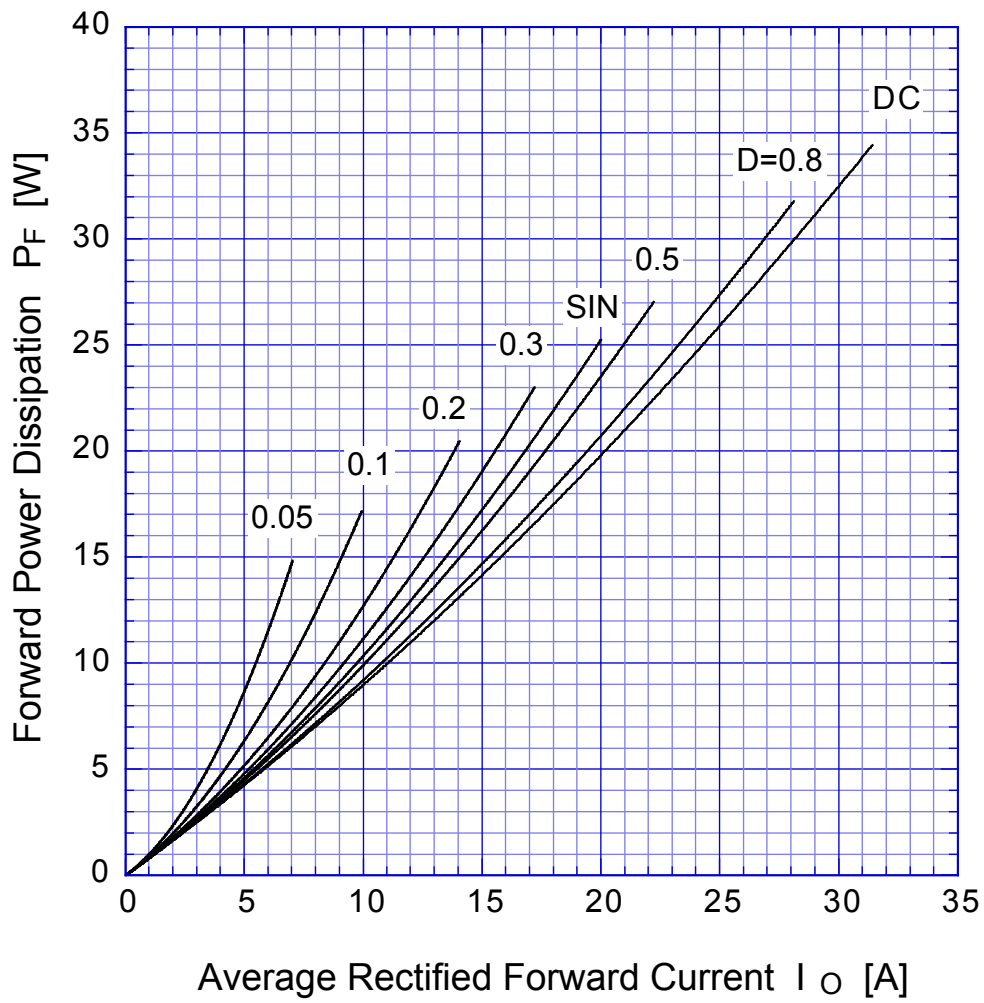
● Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$)

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	μA
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	θ_{jc}	junction to case	Max.1.5	$^\circ\text{C/W}$

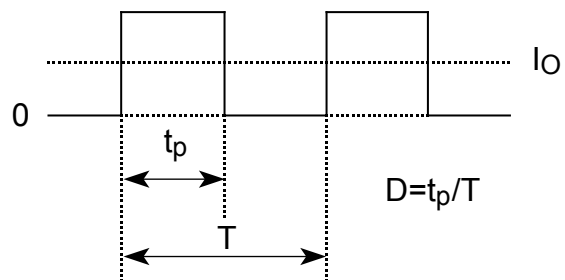
SF20LC30 Forward Voltage



SF20LC30 Forward Power Dissipation

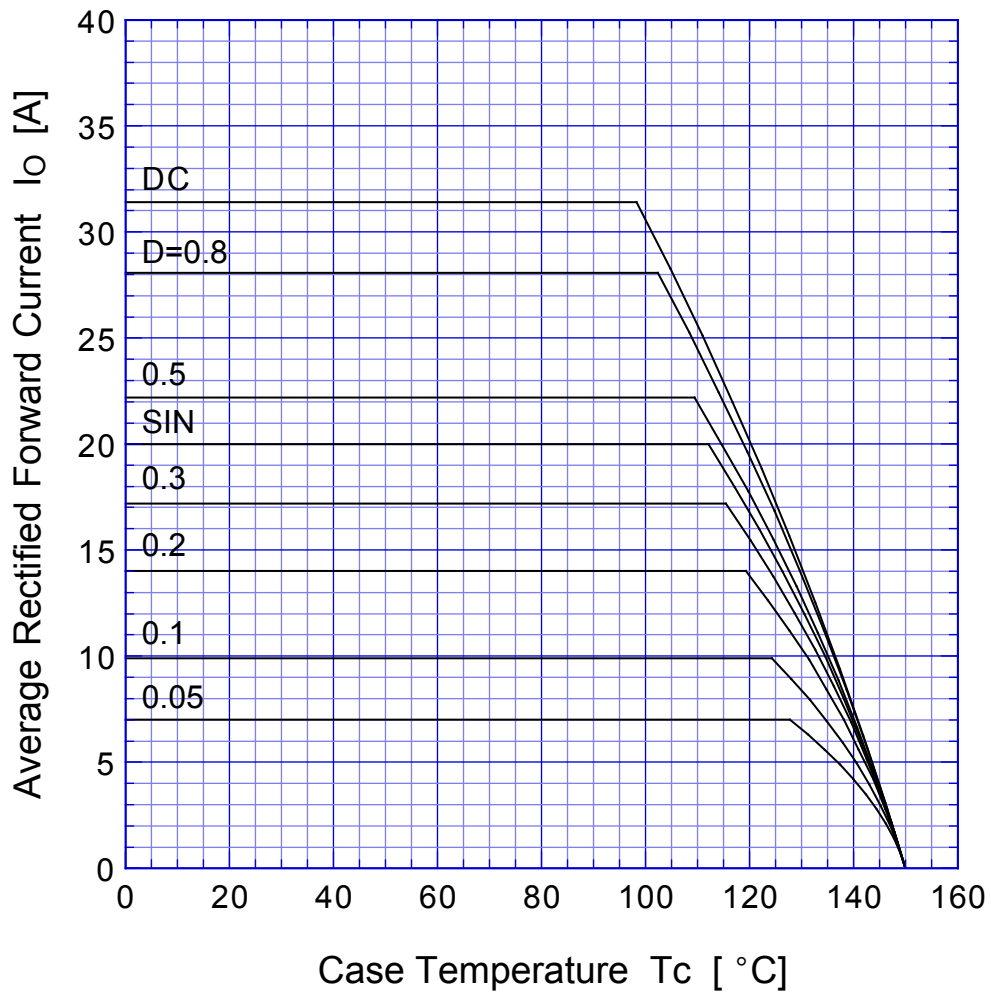


$T_j = 150^\circ\text{C}$

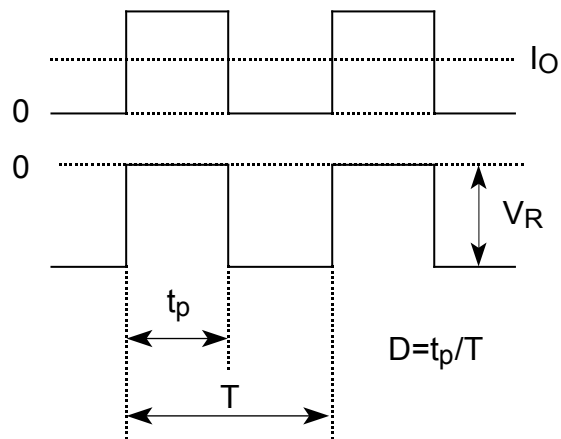


SF20LC30

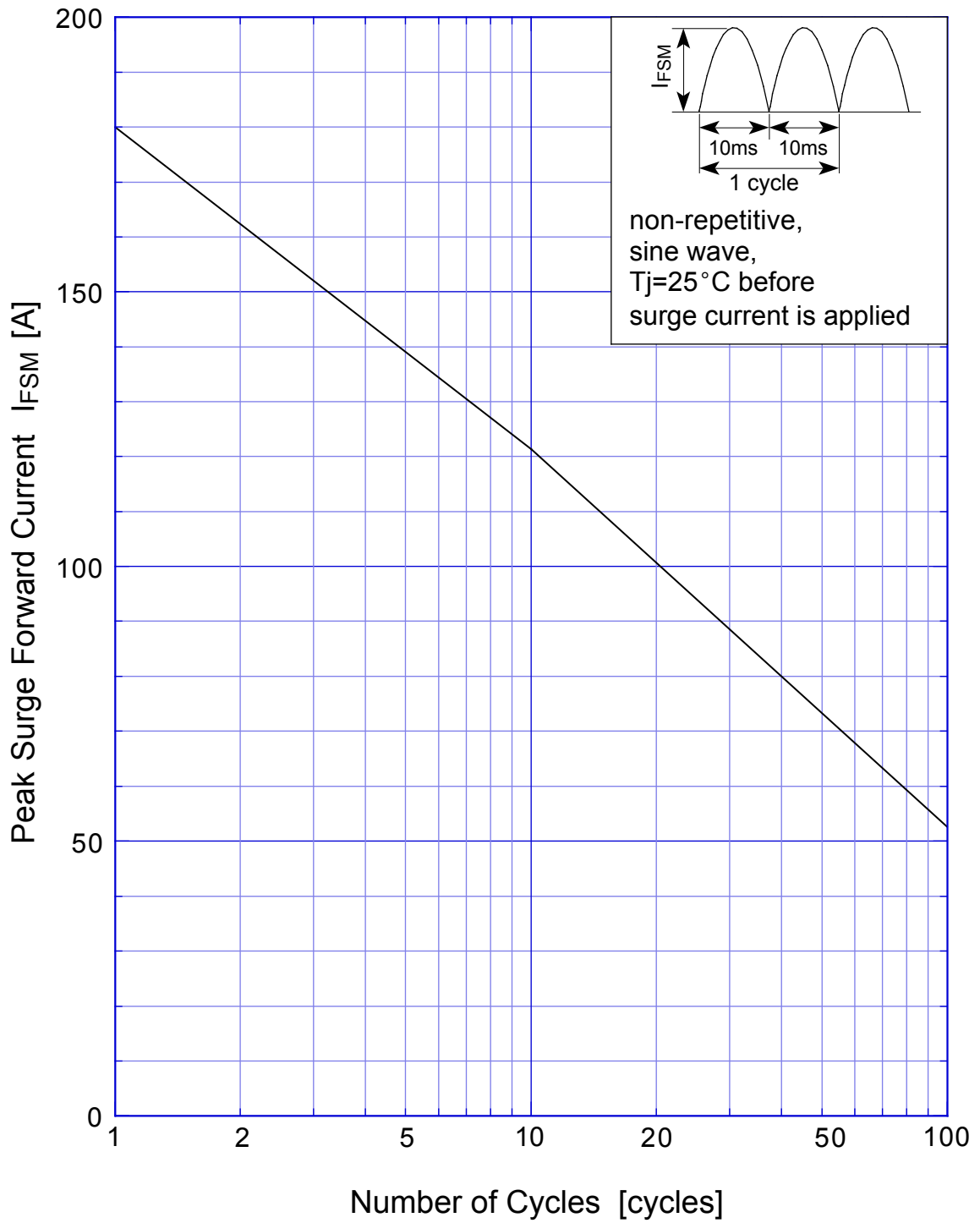
Derating Curve



$$V_R = V_{RM}$$



SF20LC30 Peak Surge Forward Capability



SF20LC30 Junction Capacitance

