

SHINDENGEN

Super Fast Recovery Rectifiers

Dual

S20LC20U

200V 20A

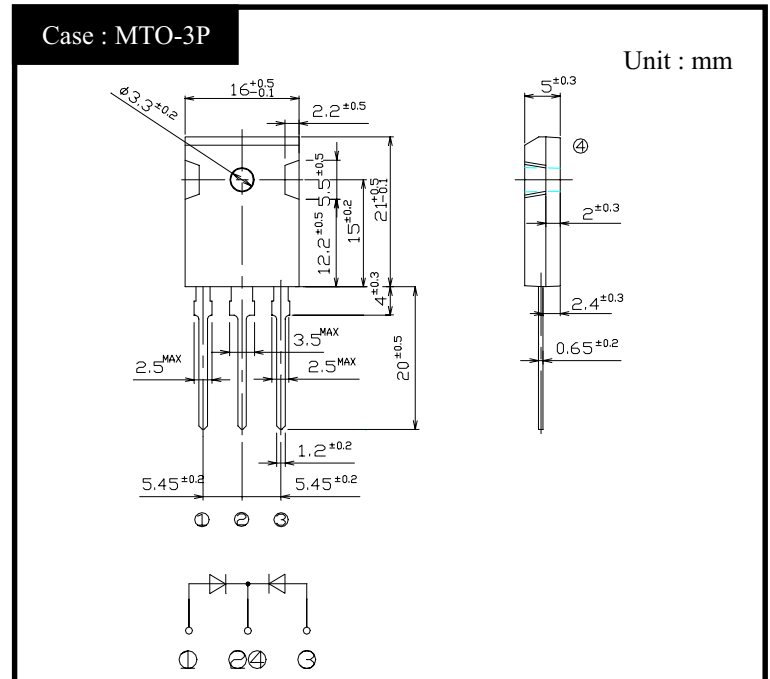
FEATURES

- Low noise
- trr35ns
- Small θ_{jc}
- Dielectric strength 2kV guaranteed

APPLICATION

- Switching power supply
- Free Wheel
- Home Appliances, Office Equipment, Factory Automation

OUTLINE DIMENSIONS



RATINGS

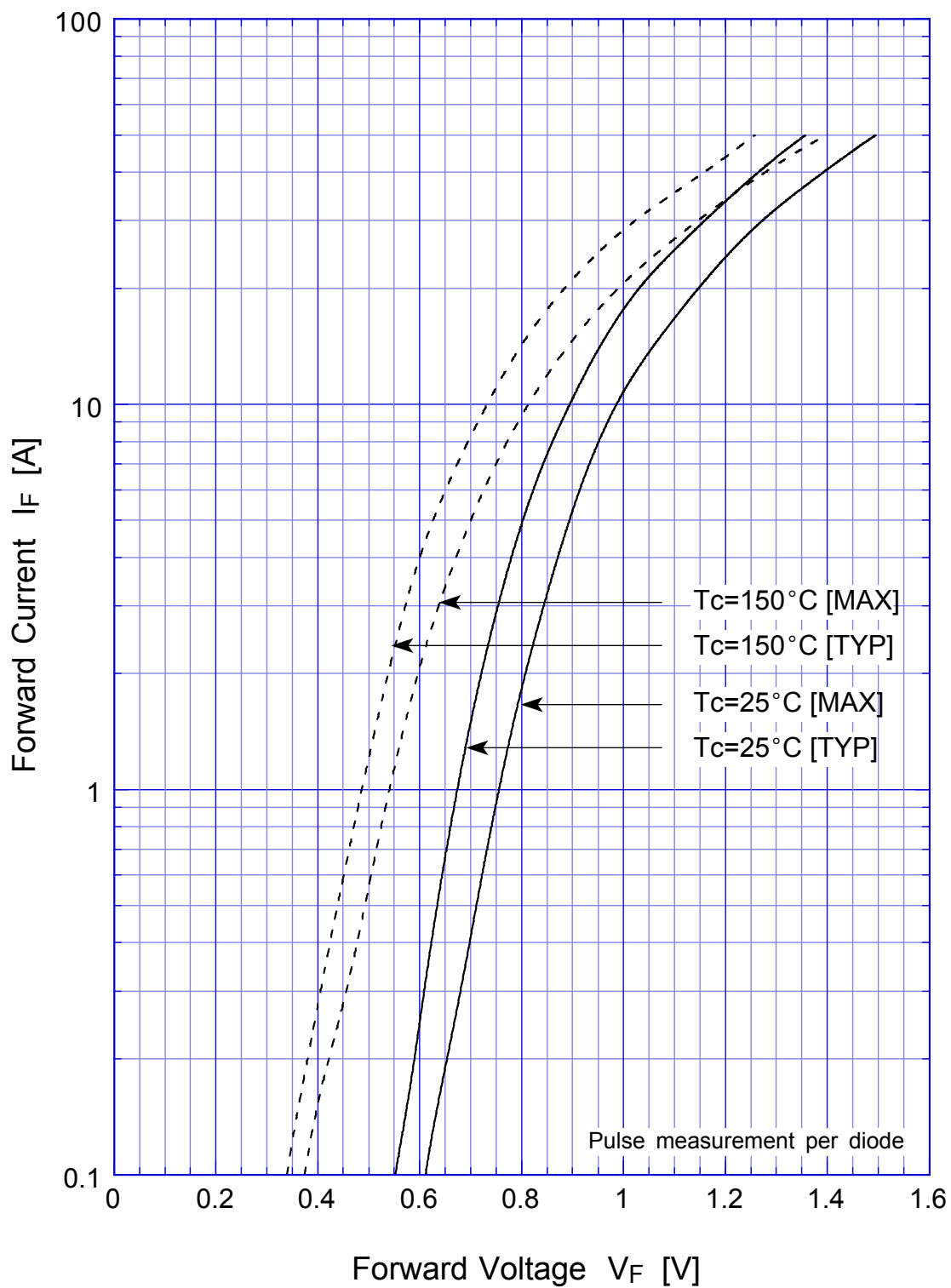
● Absolute Maximum Ratings (If not specified $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		200	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, Rating for each diode $I_O/2$, $T_c=123^\circ\text{C}$	20	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	140	A
Mounting Torque	TOR	(Recommended torque: $0.5\text{N}\cdot\text{m}$)	0.8	$\text{N}\cdot\text{m}$

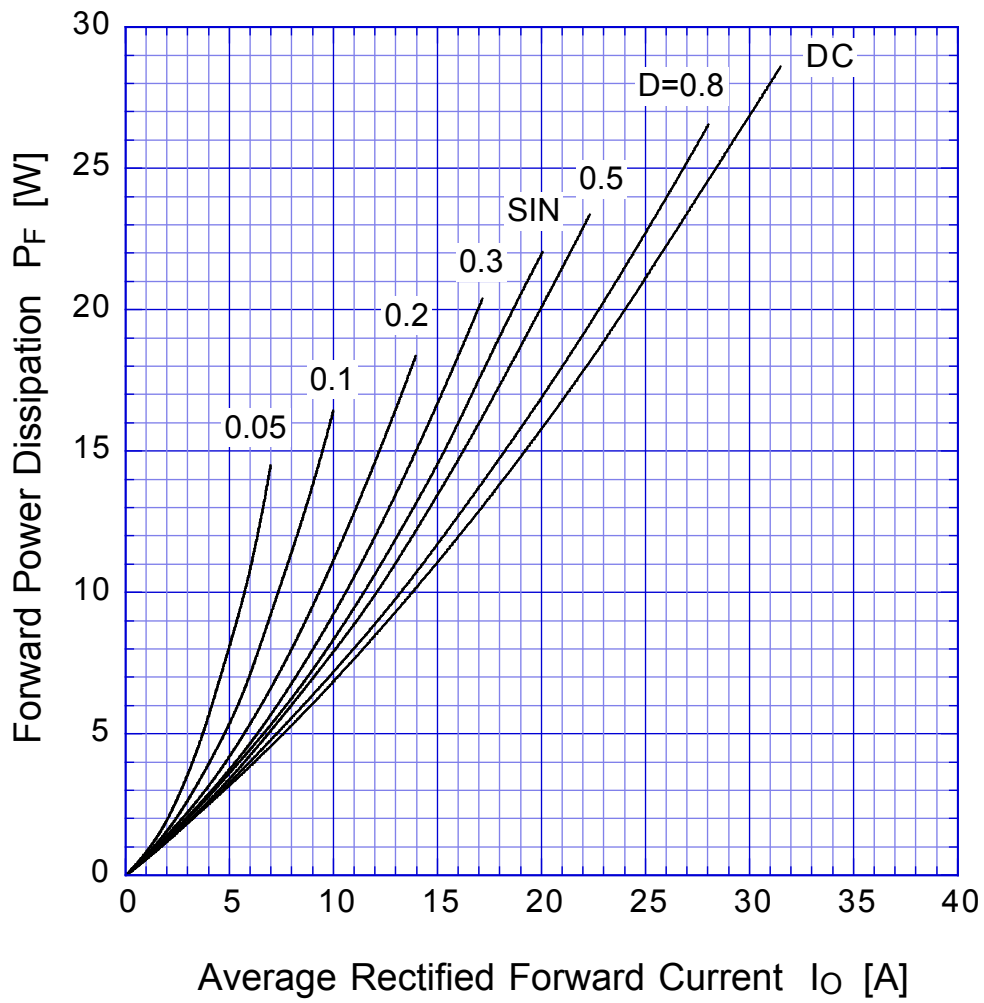
● Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=10\text{A}$, Pulse measurement, Rating of per diode	Max.0.98	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.10	μA
Reverse Recovery Time	trr	$I_F=0.5\text{A}$, $I_R=1\text{A}$, Rating of per diode	Max.35	ns
Thermal Resistance	θ_{jc}	junction to case	Max.1.2	$^\circ\text{C}/\text{W}$

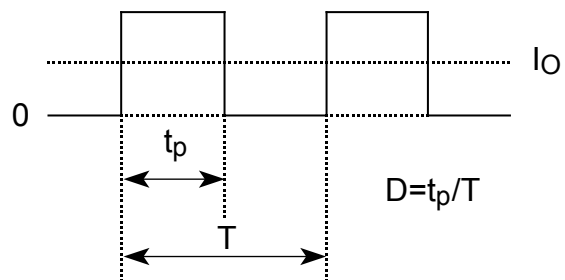
S20LC20U Forward Voltage



S20LC20U Forward Power Dissipation

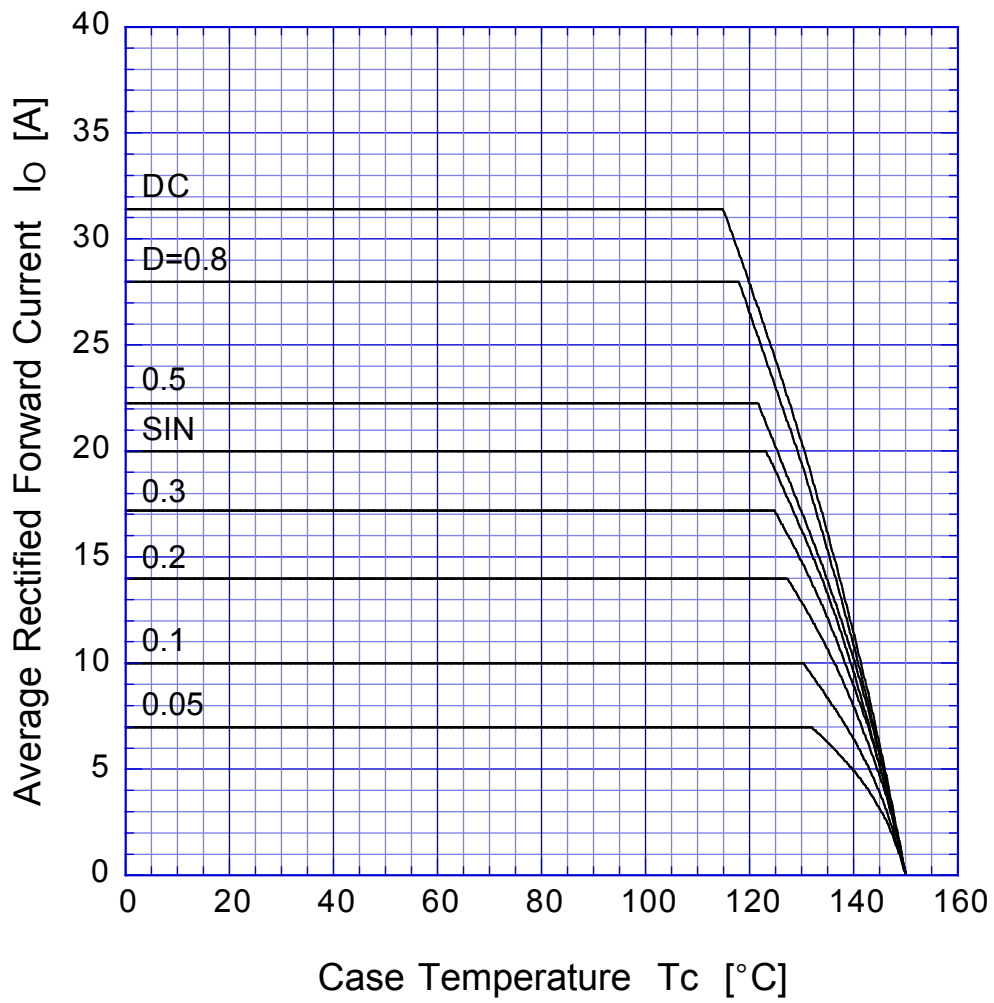


$T_j = T_{jmax}$



S20LC20U

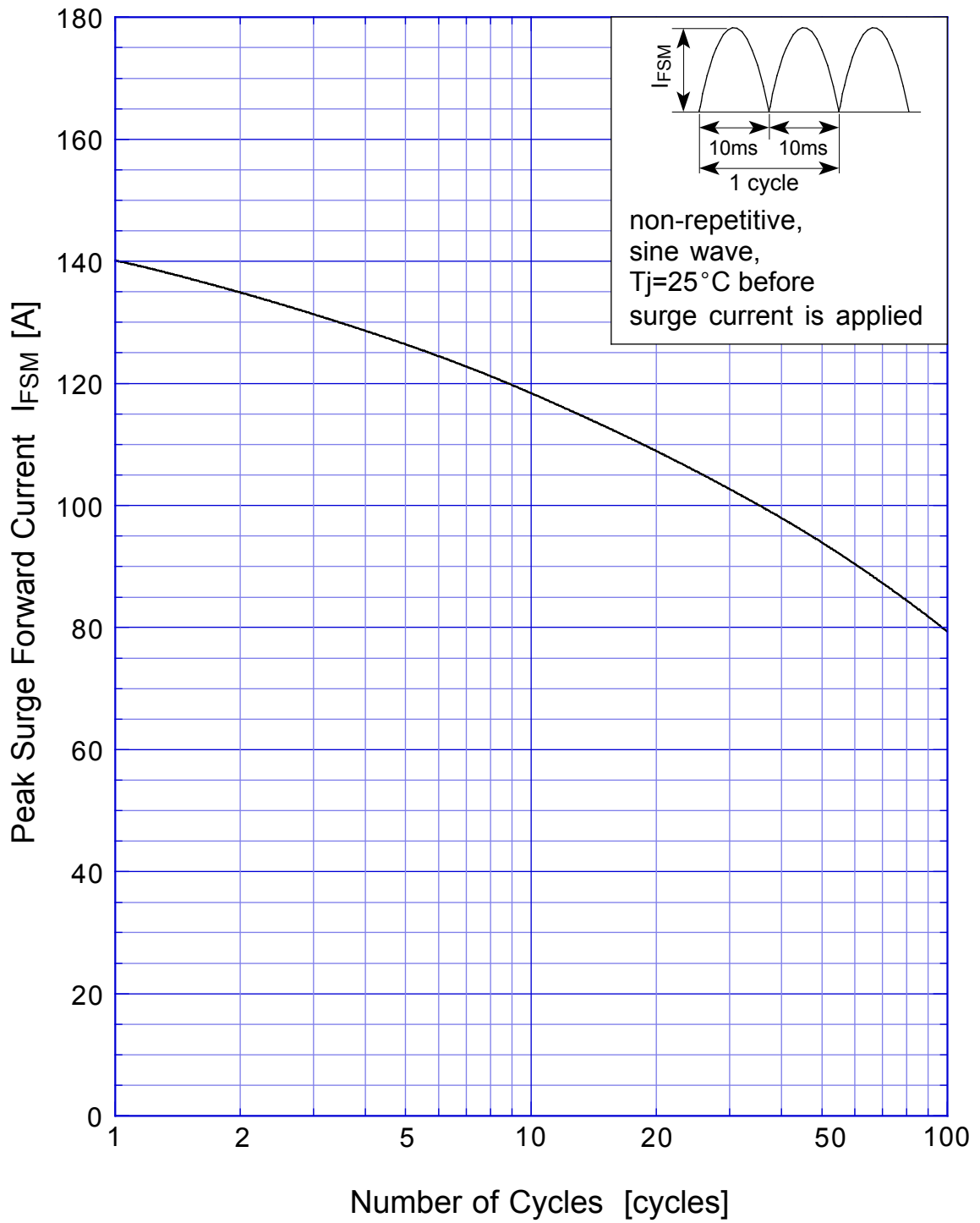
Derating Curve



$$V_R = V_{RM}$$



S20LC20U Peak Surge Forward Capability



S20LC20U Junction Capacitance

