

SHINDENGEN

Super Fast Recovery Rectifiers

Super Fast Bridges

D4SBL20U

200V 4A

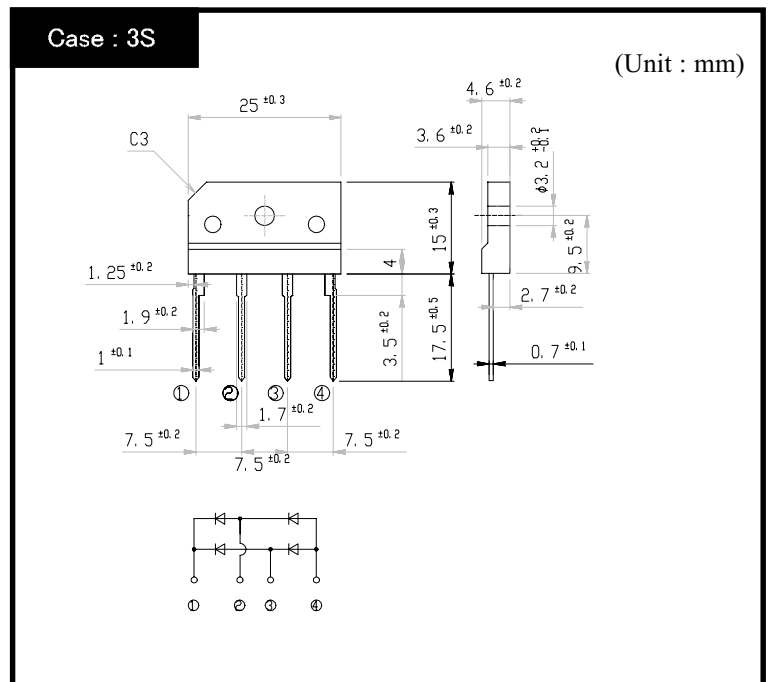
FEATURES

- Low noise
- SIL Package
- High IFSM

APPLICATION

- Switching power supply
- Home (Electrical) Appliances
- Office Equipment, Telecommunication, Factory Automation

OUTLINE DIMENSIONS



RATINGS

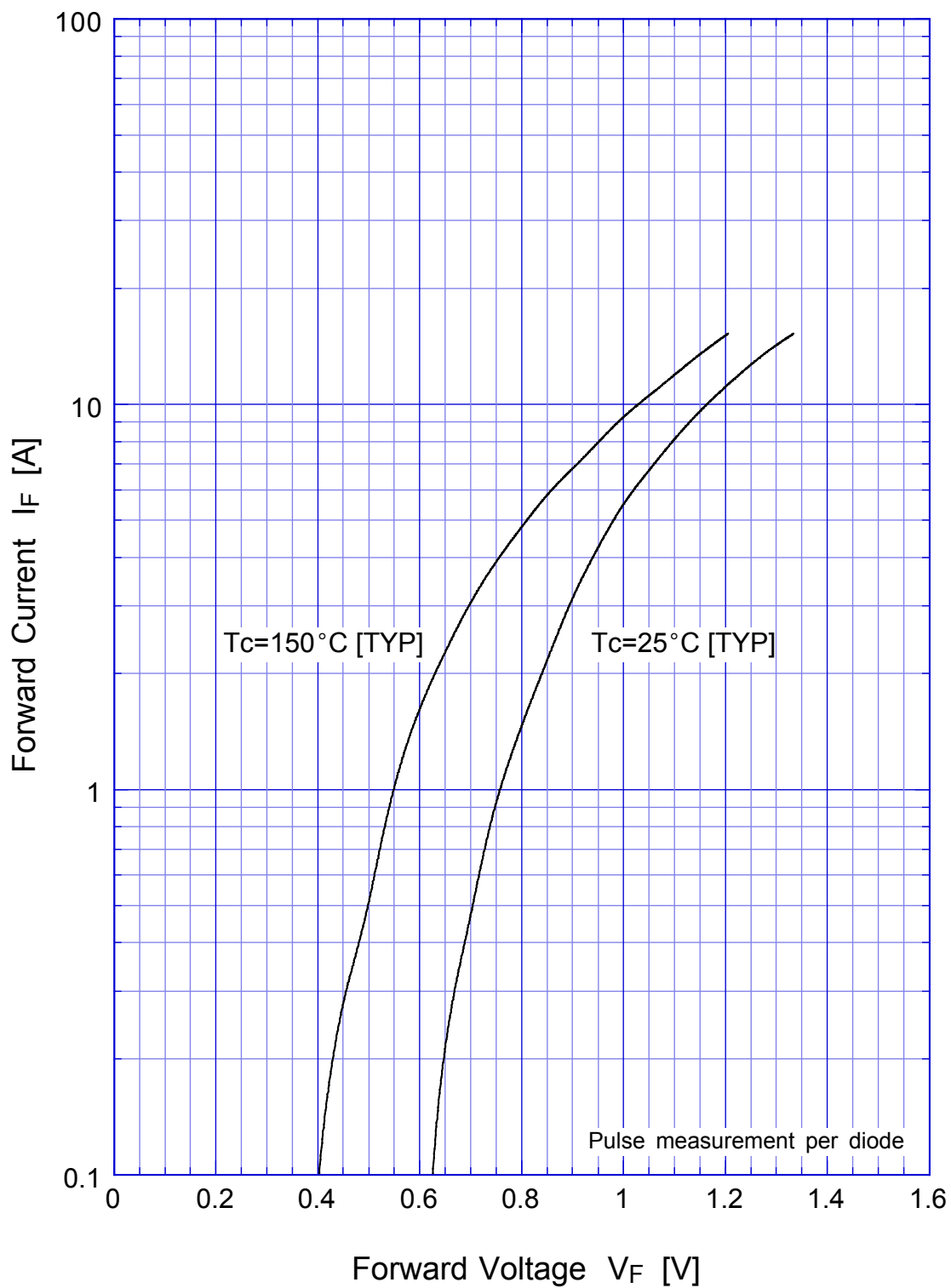
● Absolute Maximum Ratings (If not specified $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-55~150	$^\circ\text{C}$
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 With heatsink $T_c=108^\circ\text{C}$	4	A
		50Hz sine wave, R-load Without heatsink $T_a=25^\circ\text{C}$	2.5	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^\circ\text{C}$	60	A
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque: 0.5N·m)	0.8	N·m

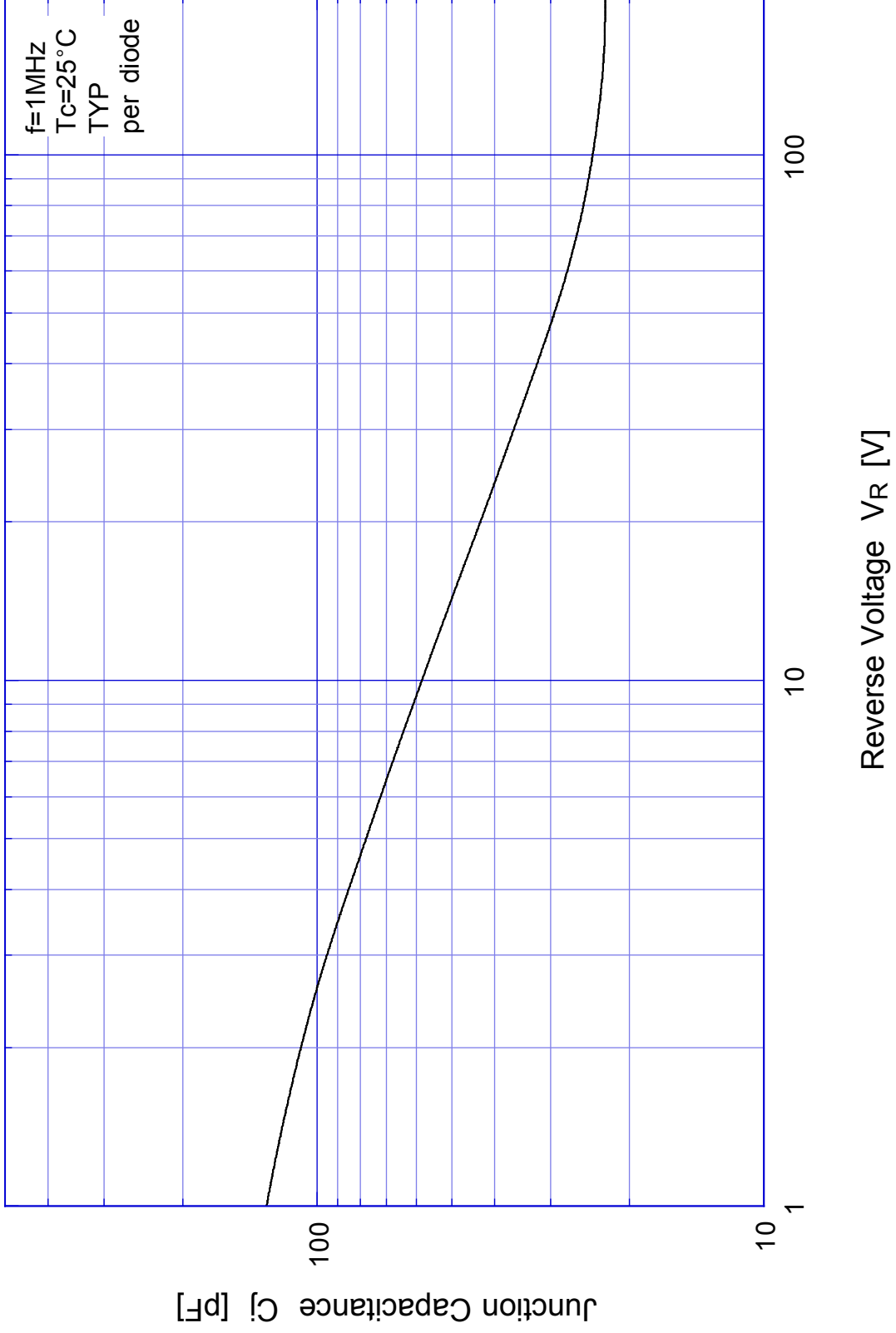
● Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=2\text{A}$, 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	t_{rr}	$I_F=0.5\text{A}$, $I_R=1\text{A}$	Max.35	ns
Thermal Resistance	θ_{jc}	junction to case With heatsink	Max.5.5	$^\circ\text{C}/\text{W}$
	θ_{jl}	junction to lead Without heatsink	Max.6	
	θ_{ja}	junction to ambient Without heatsink	Max.30	

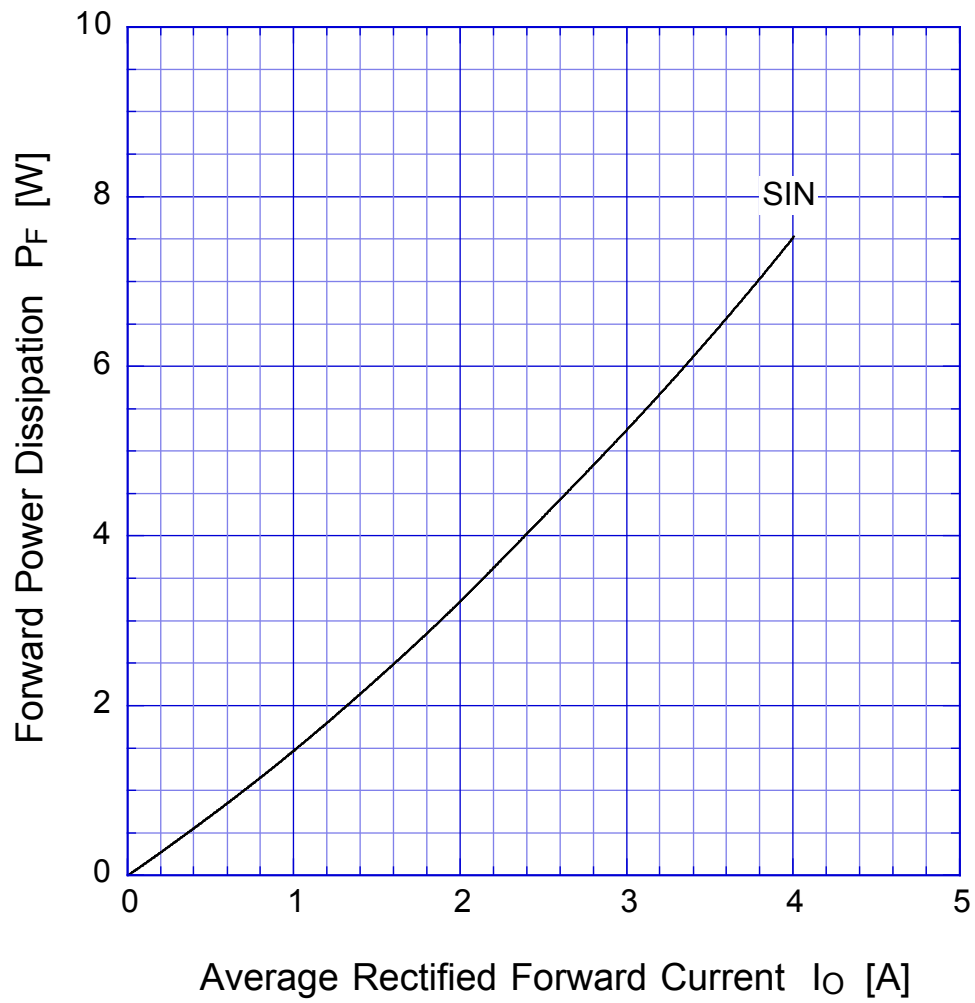
D4SBL20U Forward Voltage



D4SBL20U Junction Capacitance



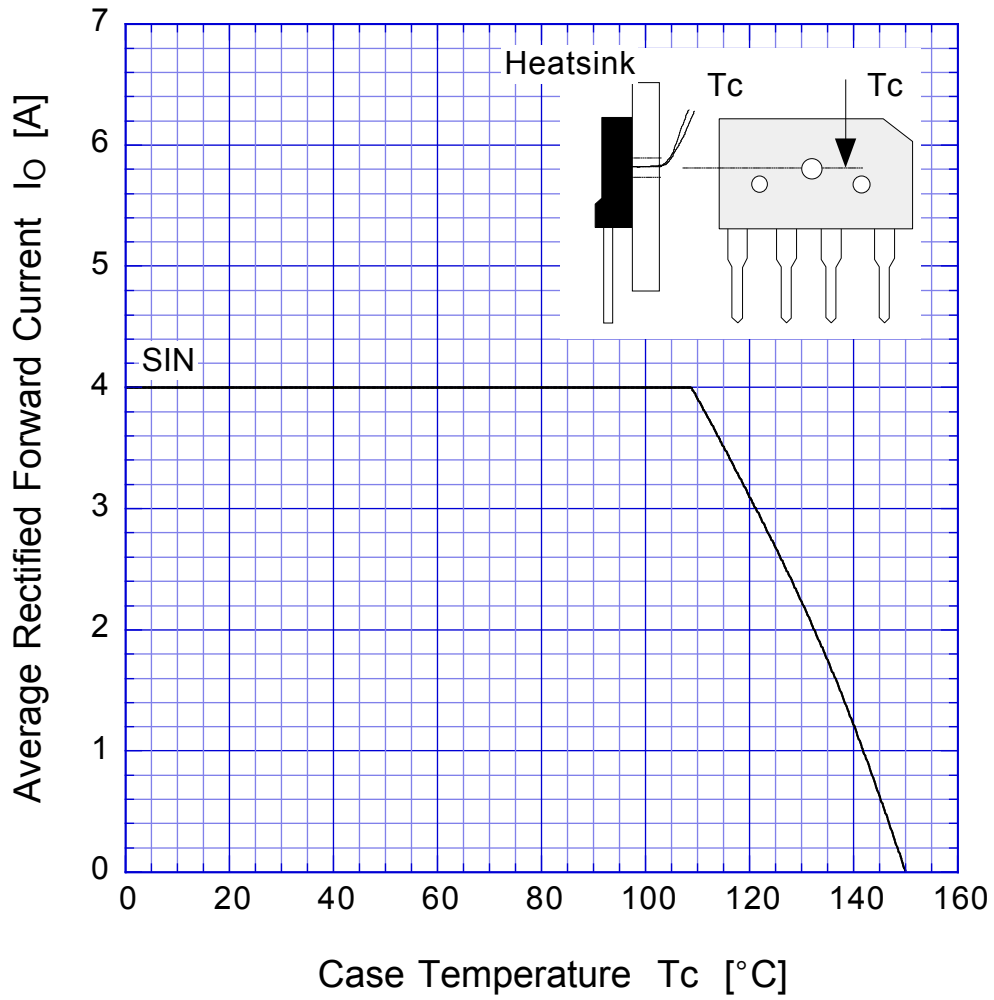
D4SBL20U Forward Power Dissipation



$T_j = T_{jmax}$

D4SBL20U

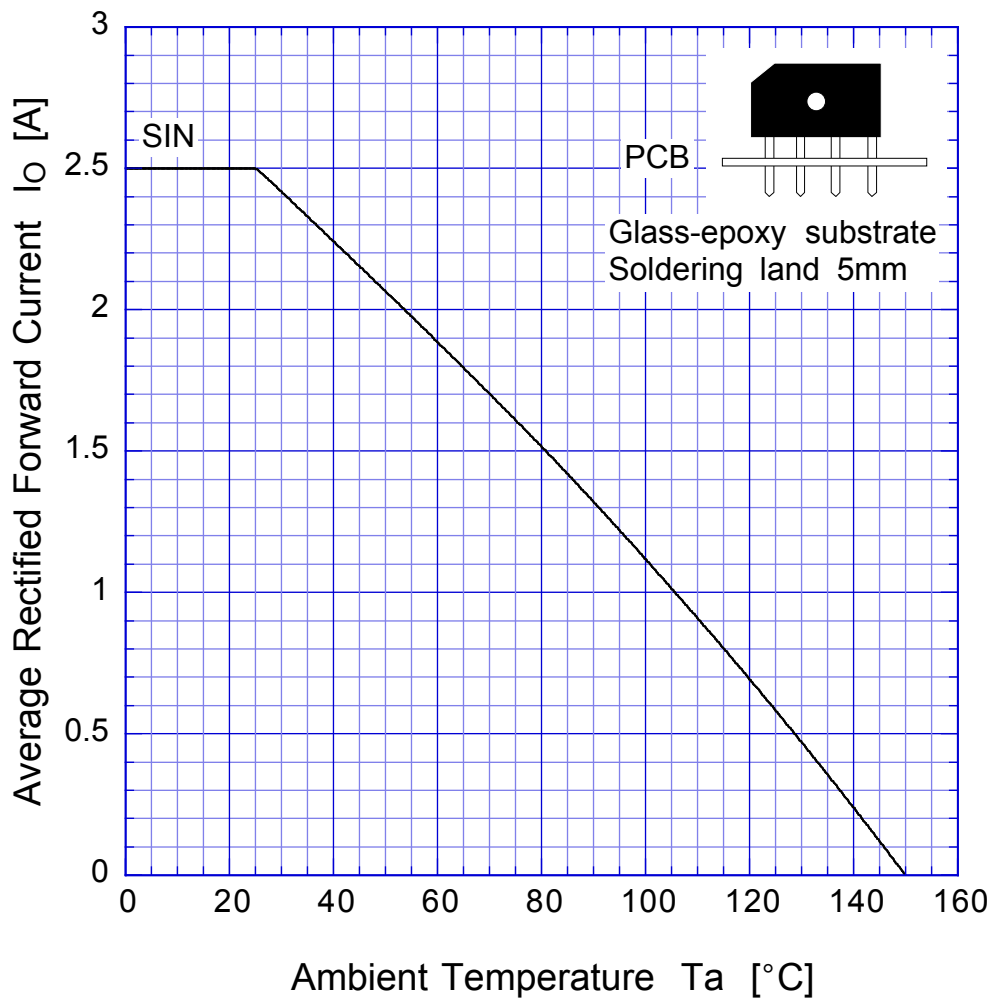
Derating Curve



Sine wave
R-load
with heatsink

D4SBL20U

Derating Curve



$V_R = V_{RM}$
Sine wave
R-load
Free in air

D4SBL20U Peak Surge Forward Capability

