

SHINDENGEN

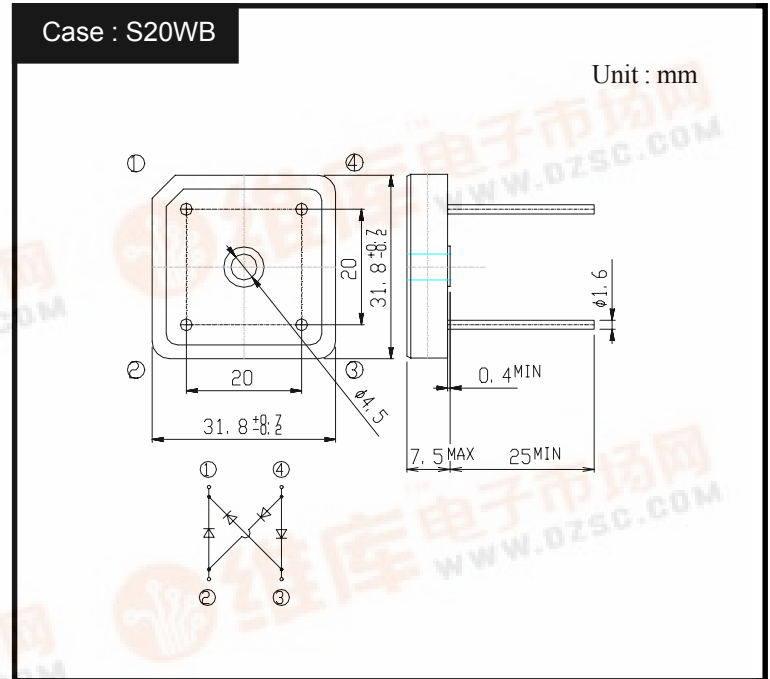
Bridge Diode

Square In-line Package

S20WB20

200V 20A

OUTLINE DIMENSIONS



RATINGS

Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-40~150	°C
Operating Junction Temperature	T _j		150	°C
Maximum Reverse Voltage	V _{RM}		200	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load With heatsink T _c =76°C	20	A
		50Hz sine wave, R-load Without heatsink Ta=25°C	4.5	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, T _j =25°C	500	A
Current Squared Time	I ² t	1ms ≤ t < 10ms T _c =25°C	800	A ² s
Dielectric Strength	V _{dis}	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 1N·m)	2	N·m

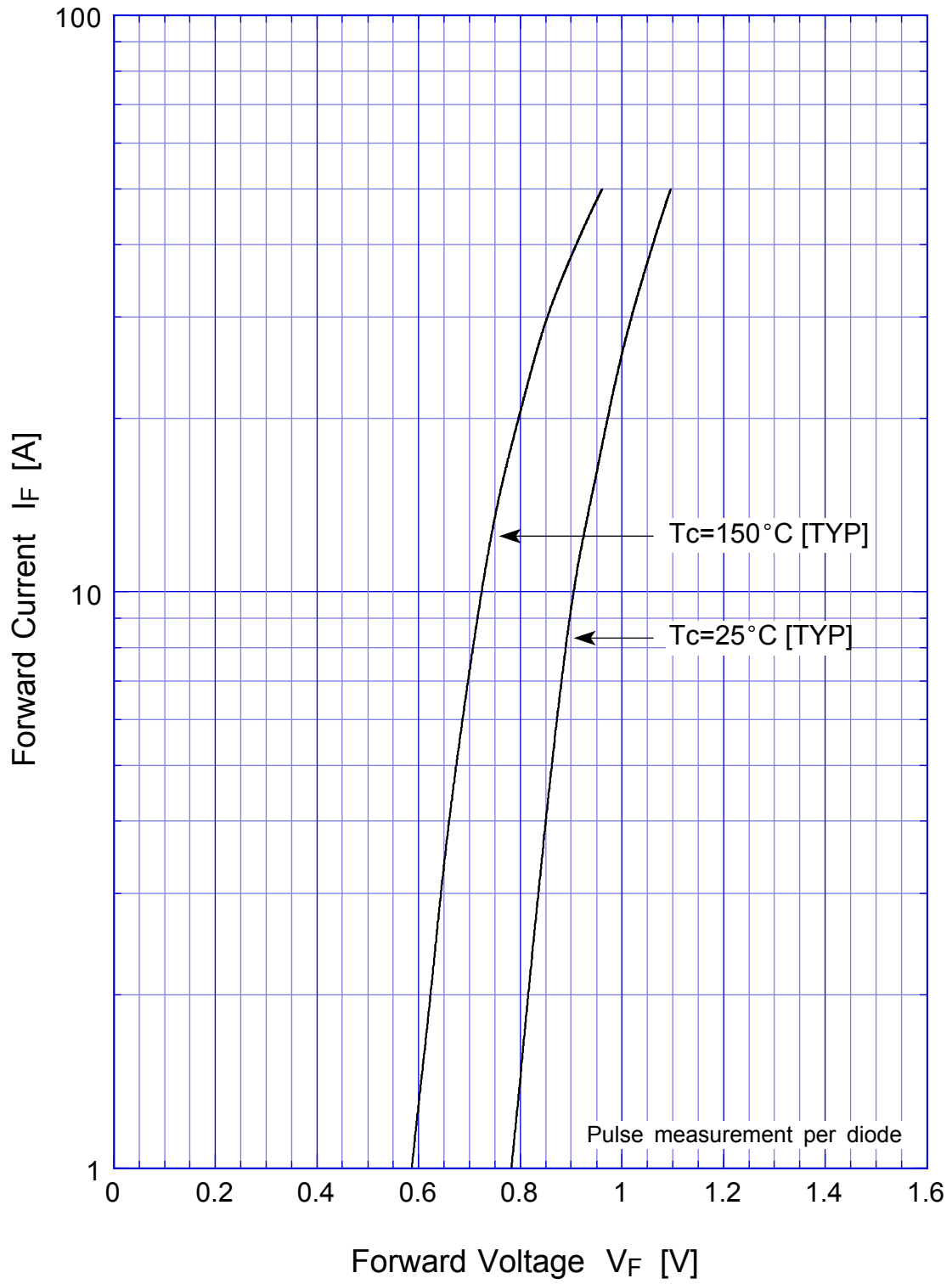
Electrical Characteristics (T_c=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =10A, Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	θ _{jc}	junction to case	Max.2	°C/W
	θ _{jl}	junction to lead	Max.2	
	θ _{ja}	junction to ambient	Max.17	

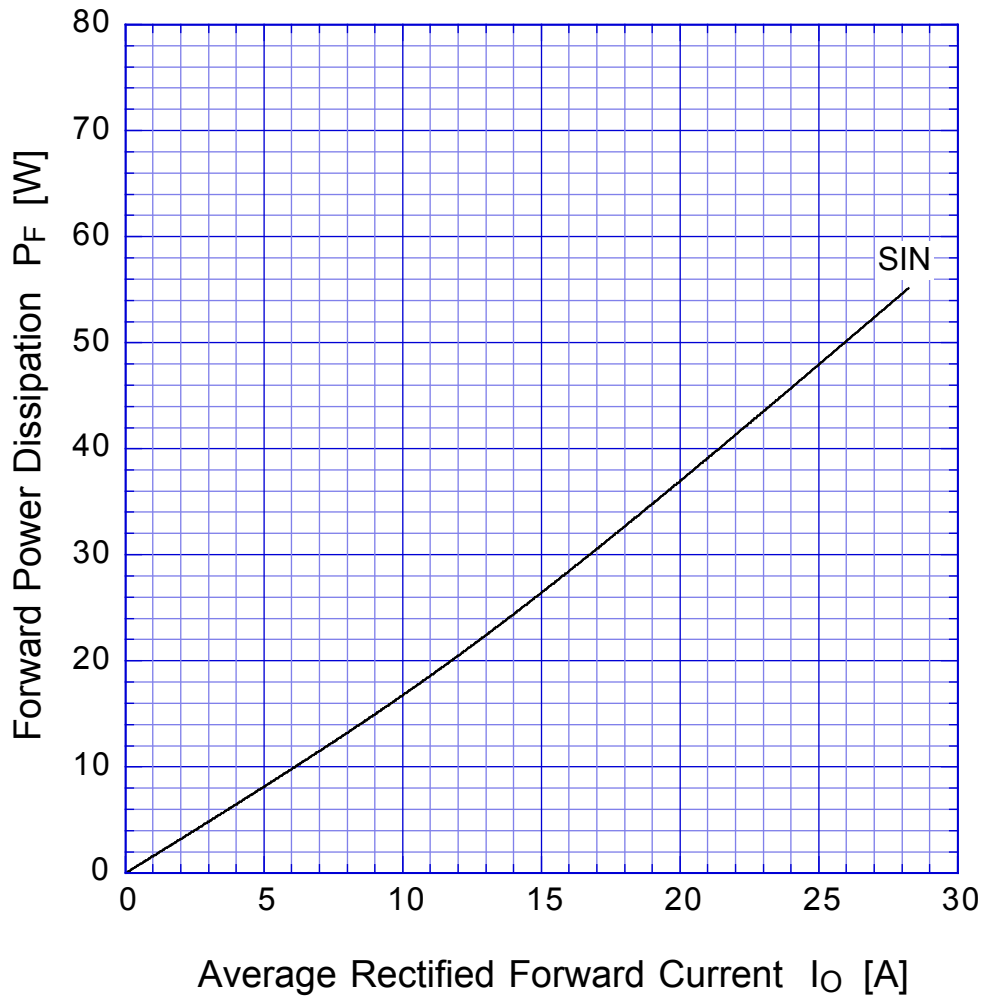


S20WBx

Forward Voltage



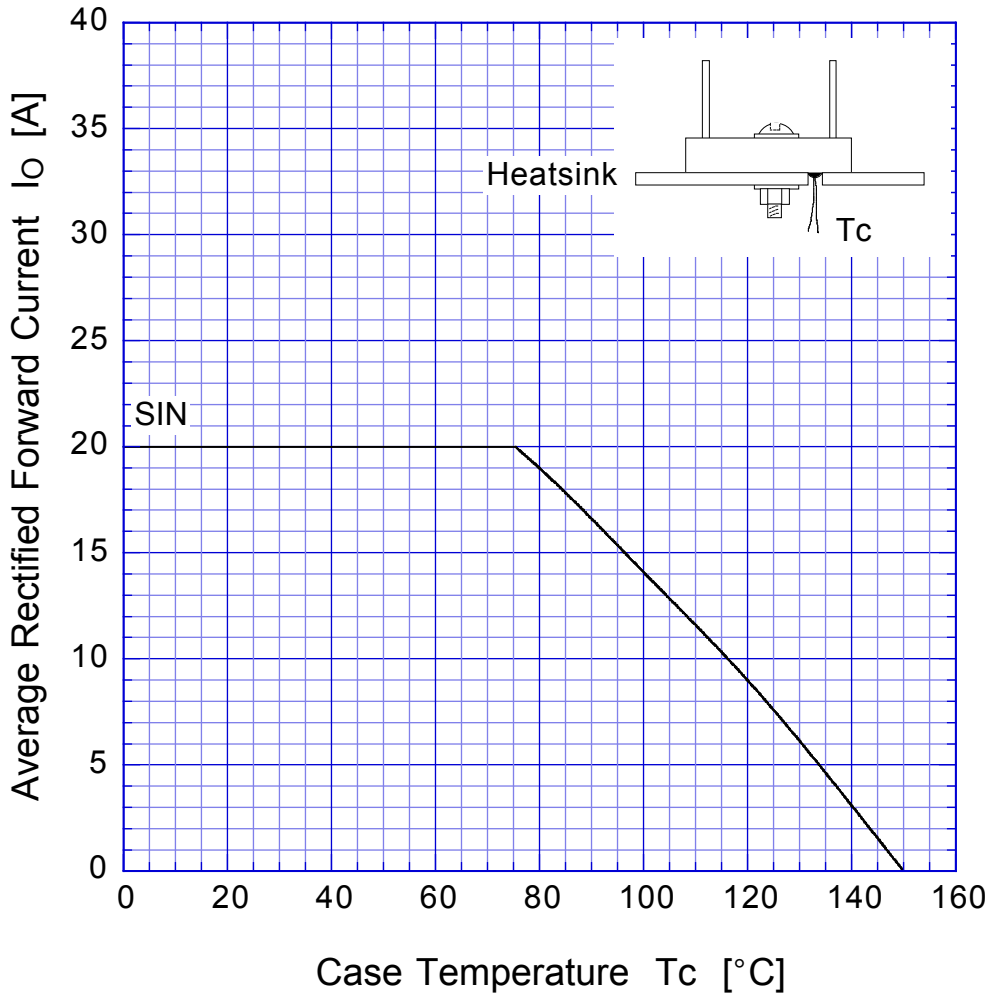
S20WBx Forward Power Dissipation



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

S20WBx

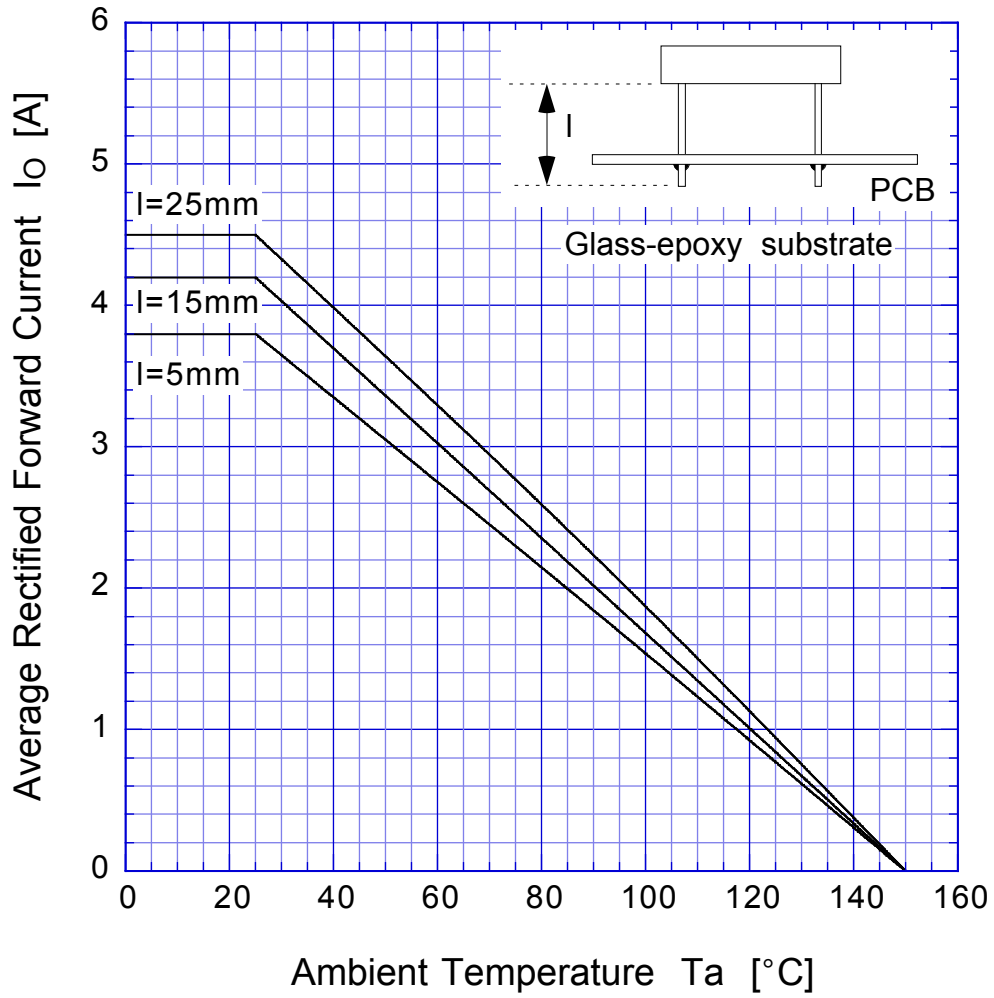
Derating Curve



Sine wave
R-load
with heatsink

S20WBx

Derating Curve



Sine wave
R-load
Free in air

S20WBx

Peak Surge Forward Capability

