SHINDENGEN

General Purpose Rectifiers

Square In-line Package

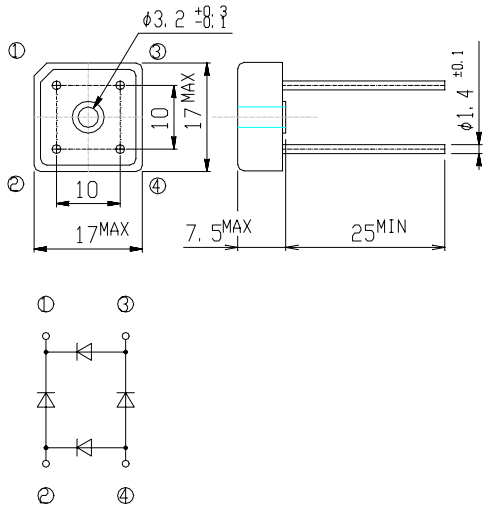
S4VB20

200V 4A

OUTLINE DIMENSIONS

Case : S4VB

Unit : mm



RATINGS

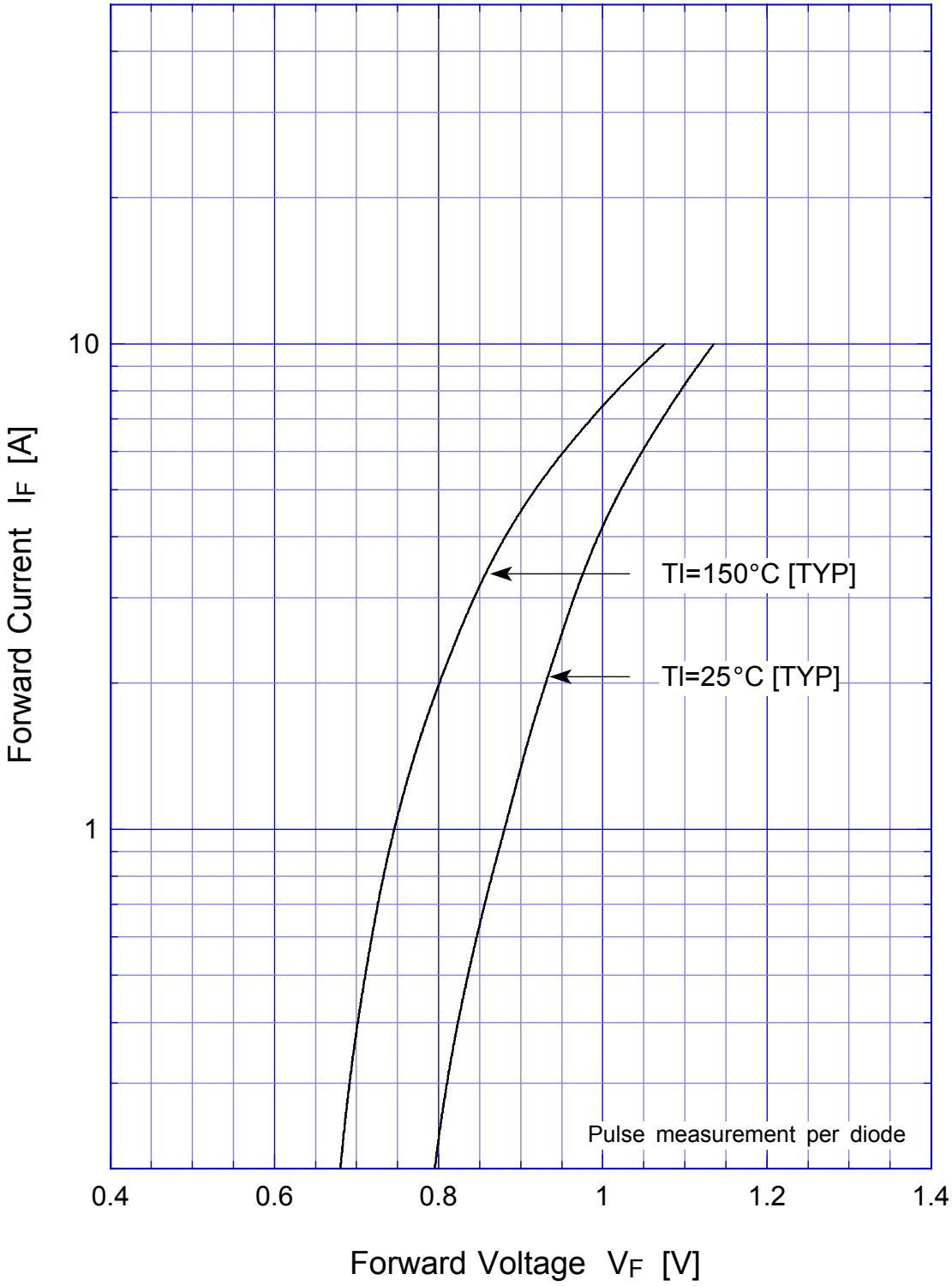
● Absolute Maximum Ratings

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40～150	℃
Operating Junction Temperature	Tj		150	℃
Maximum Reverse Voltage	V_{RM}		200	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, Ta=40℃ With heatsink θfa=10℃/W	4	A
		50Hz sine wave, R-load, Ta=40℃ Without heatsink	2.6	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25℃	80	A
Current Squared Time	I^2t	1ms≦t＜10ms Tj=25℃	32	A^2s
Mounting Torque	TOR	(Recommended torque : 0.5N･m)	0.8	N･m

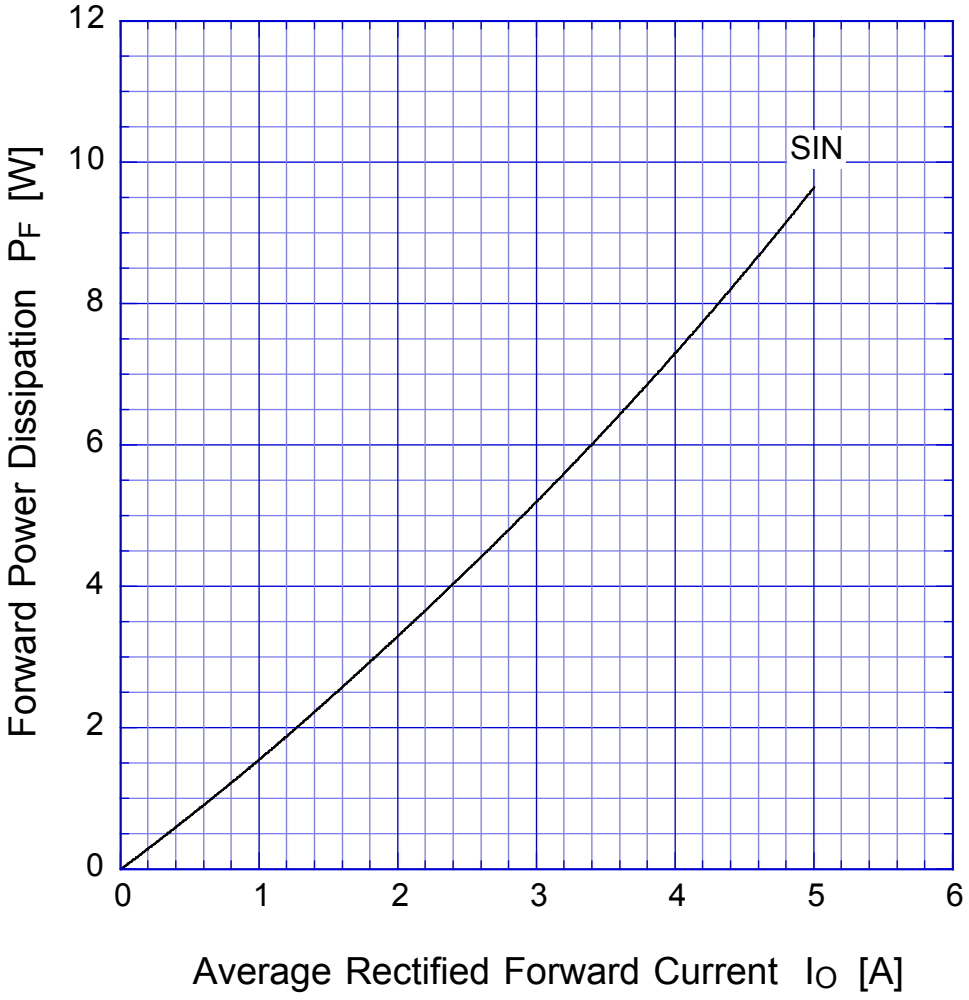
● Electrical Characteristics (Tl=25℃)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	IF=2A, 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	θjl	junction to lead	Max.4.5	℃/W

S4VBx Forward Voltage

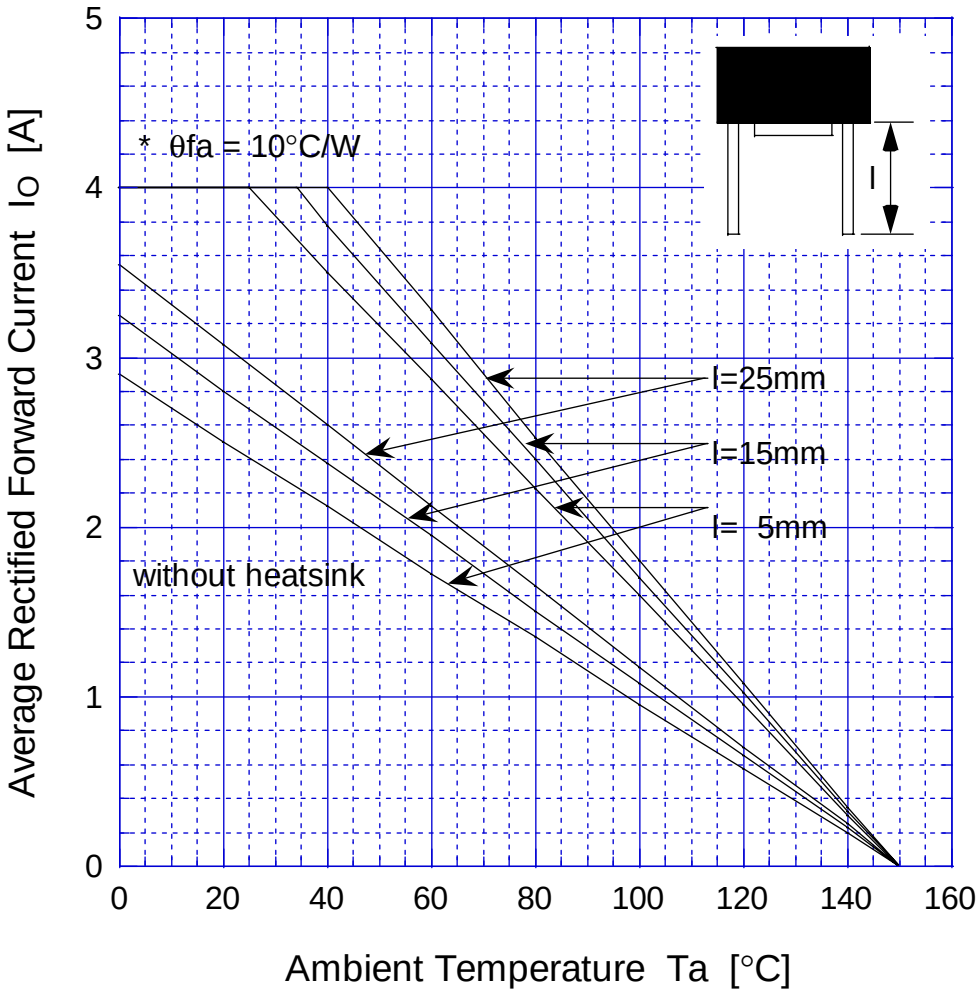


S4VBx Forward Power Dissipation

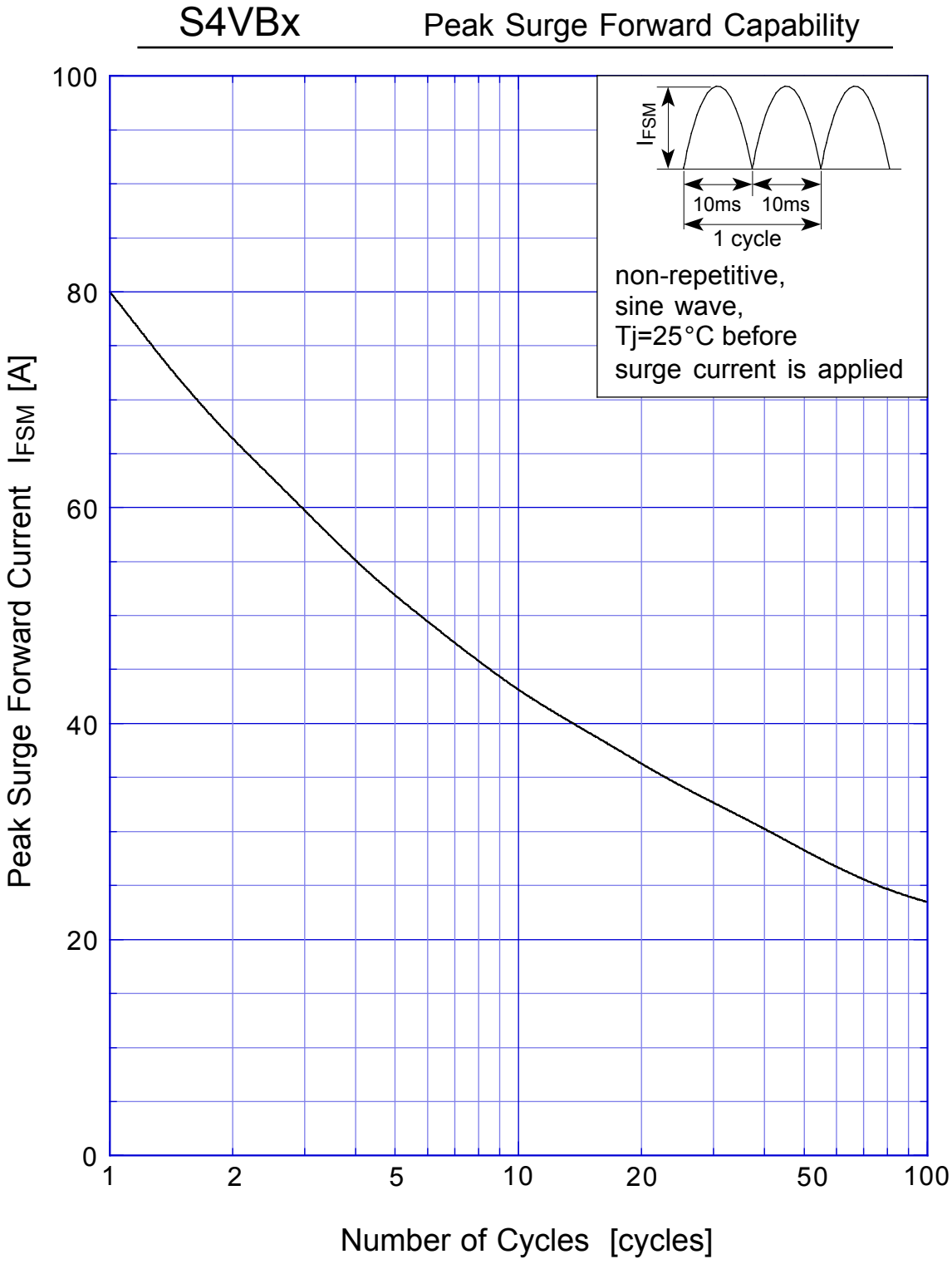


Tj = 150°C
Sine wave

S4VBx Derating Curve



Sine wave
R-load
Free in air
* with thermal compound, TOR=0.3N-m


S4VBx
Peak Surge Forward Capability
100
80
60
40
20
0
1
2
5
10
20
50
100
Peak Surge Forward Current IFSM [A]
Number of Cycles [cycles]
IFSM
10ms
10ms
1 cycle
non-repetitive,
sine wave,
Tj=25°C before
surge current is applied