SHINDENGEN

General Purpose Rectifiers

SMT Bridges

S1NB20

200V 1A

FEATURES

- Small Dual In-Line(:DIL) Package
- 5 mm pitch between terminals
- Applicable to Automatic Insertion

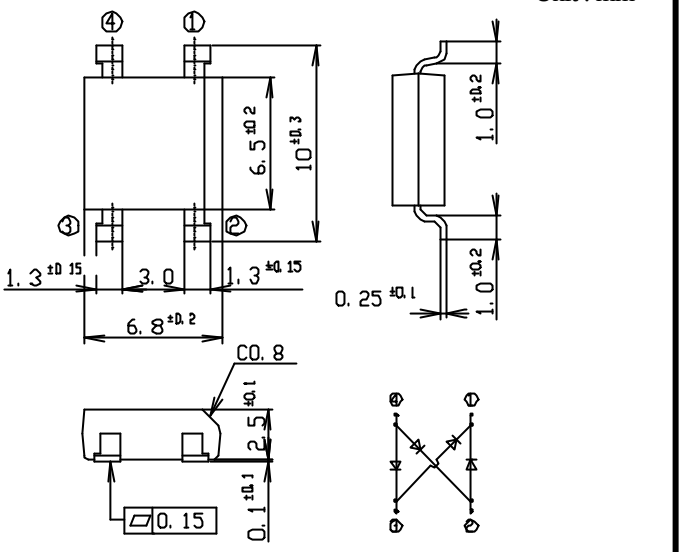
APPLICATION

- Switching power supply
- Home Appliances, Office Equipment
- Telecommuication, Factory Automation

OUTLINE DIMENSIONS

Case : 1N

Unit : mm



RATINGS

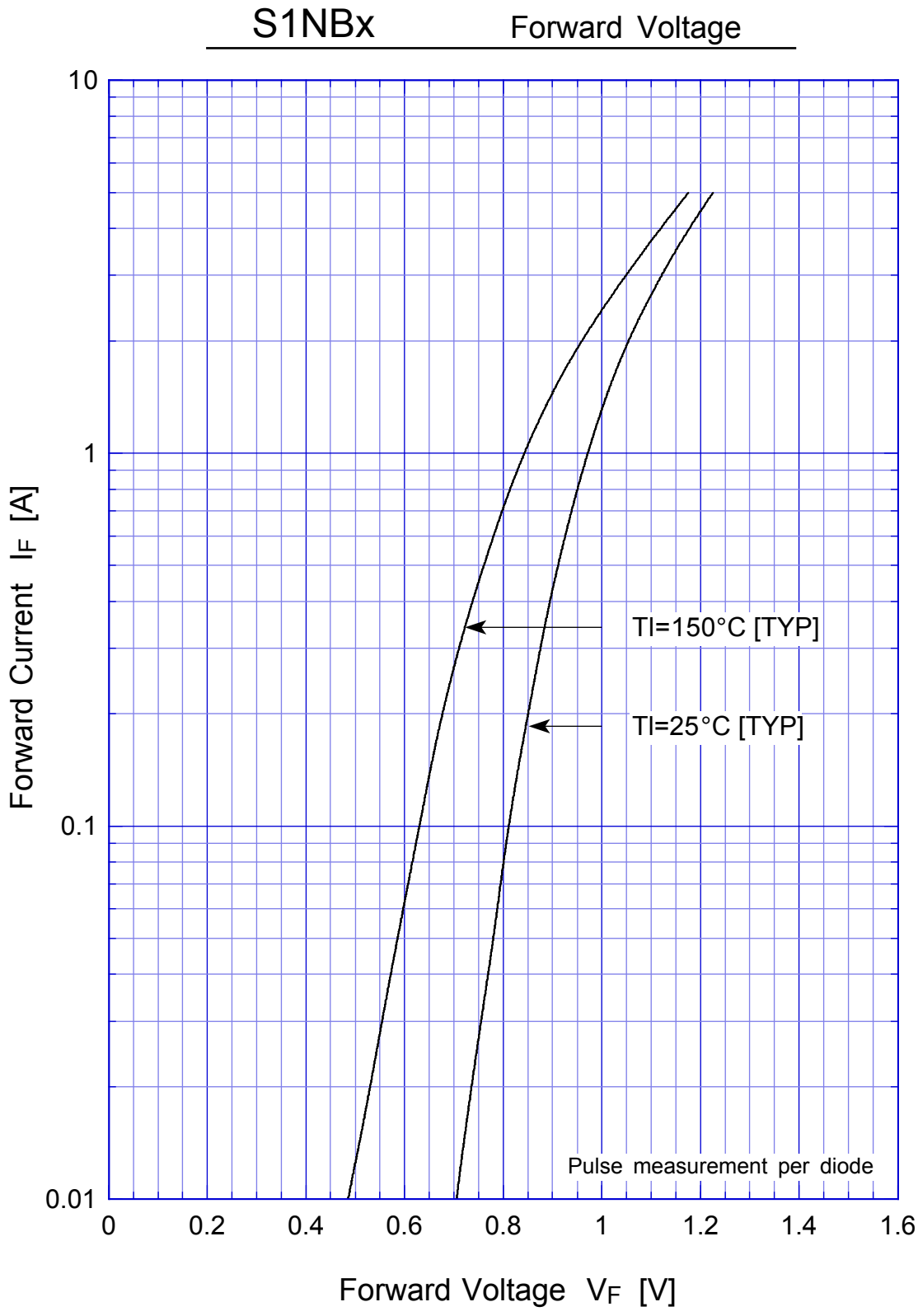
●Absolute Maximum Ratings (If not specified Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40～150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V_{RM}		200	V
Average Rectified Forward Current	Io	50Hz sine wave, R-load, On glass-epoxy substrate, Ta=25°C	1	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C	30	A
Current Squared Time	I^2t	1ms≦t＜10ms Tj=25°C	4.5	A^2s

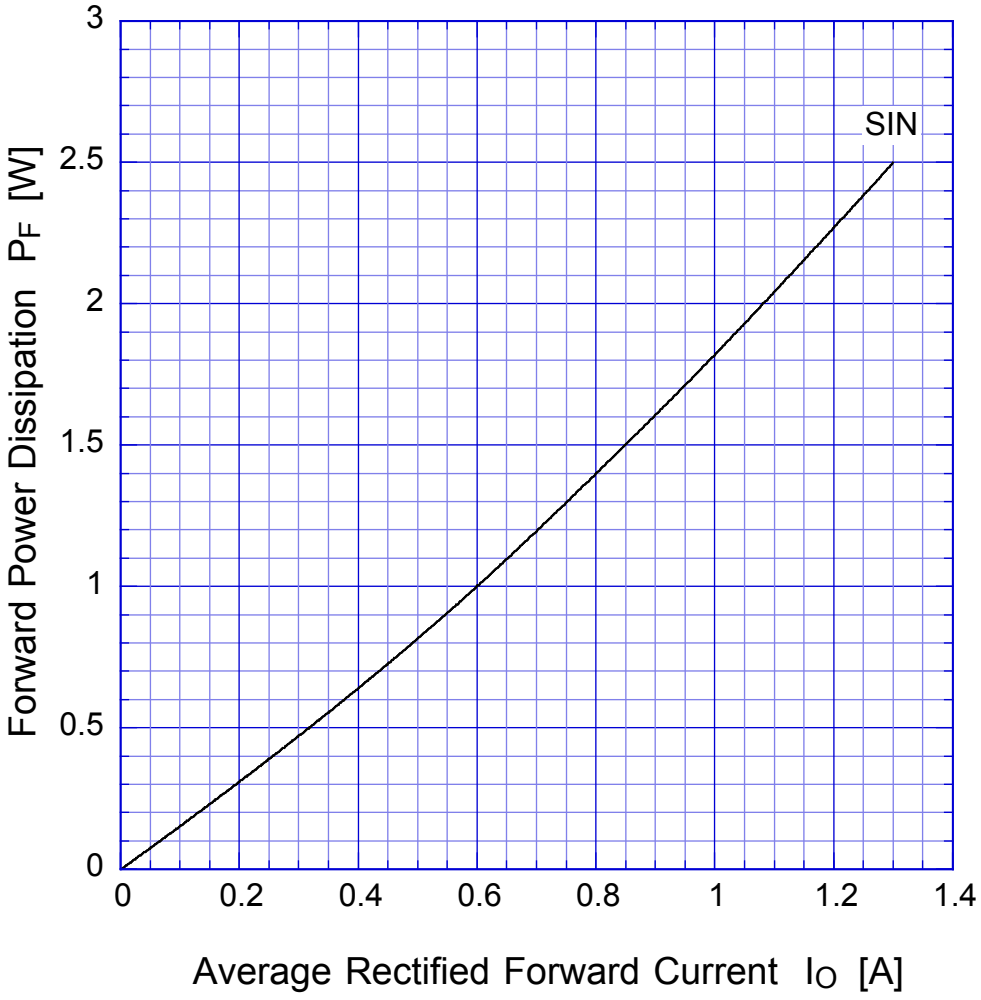
●Electrical Characteristics (If not specified Tl=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	I_F=0.5A, 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.15	°C/W
	θja	junction to ambient	Max.68	

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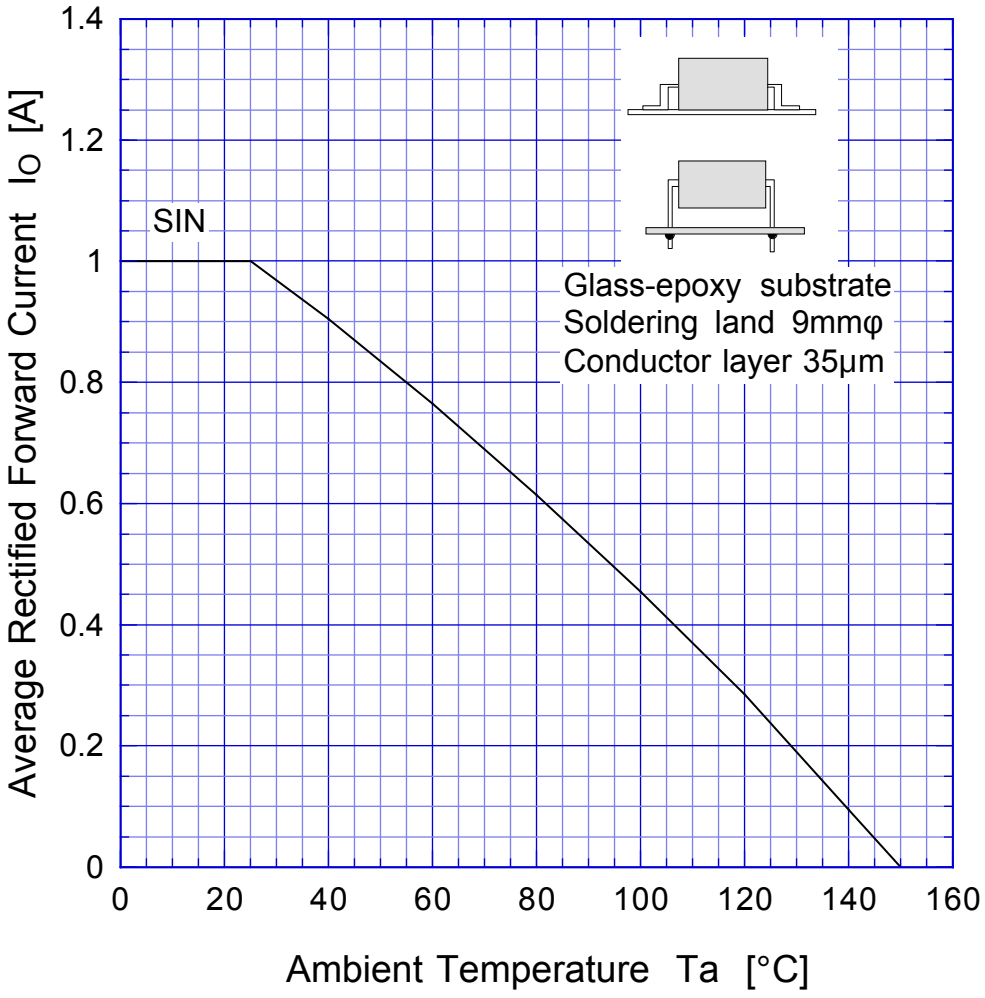

S1NBx
Forward Voltage
10
1
0.1
0.01
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
Forward Current IF [A]
Forward Voltage VF [V]
Tl=150°C [TYP]
Tl=25°C [TYP]
Pulse measurement per diode

S1NBx Forward Power Dissipation

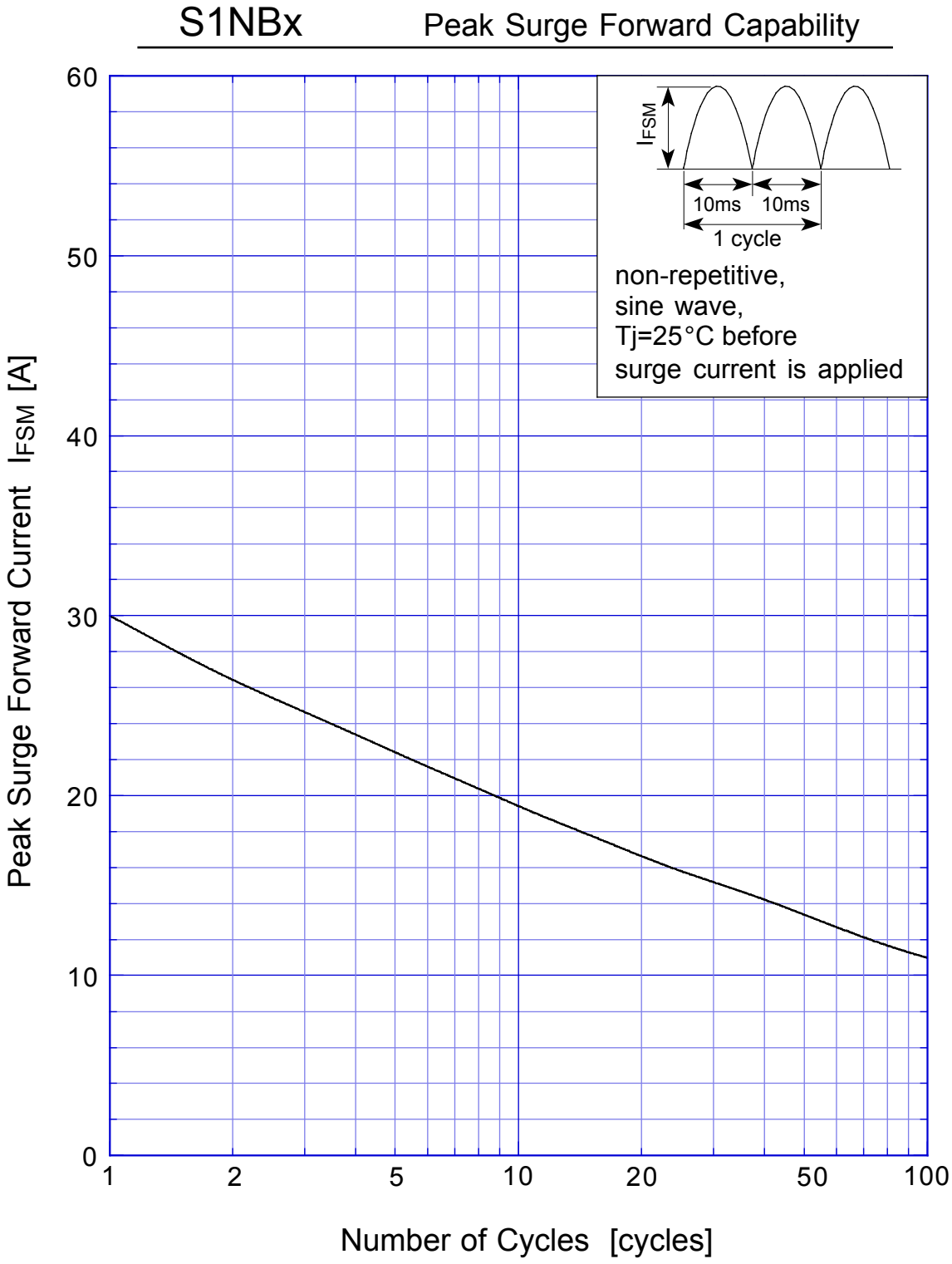


Tj = 150°C
Sine wave

S1NBx Derating Curve



Sine wave
R-load
Free in air


S1NBx
Peak Surge Forward Capability
60
50
40
30
20
10
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