SHINDENGEN

General Purpose Rectifiers

Single

D1N20

200V 1A

FEATURES

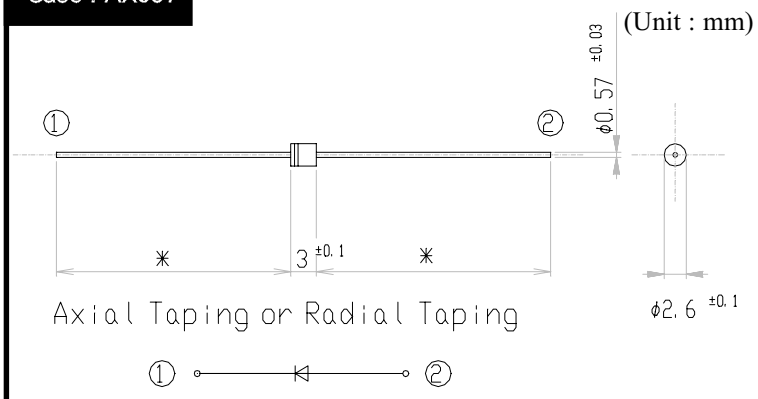
- High voltage
- High reliability with superior moisture resistance
- 5 mm pitch mounting applicable

APPLICATION

- Conventional Rectification
- Power source(Power Supply)
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

OUTLINE DIMENSIONS

Case : AX057



*Taping Code No.4000:20MIN
No.4060:27MIN
No.4070:15MIN

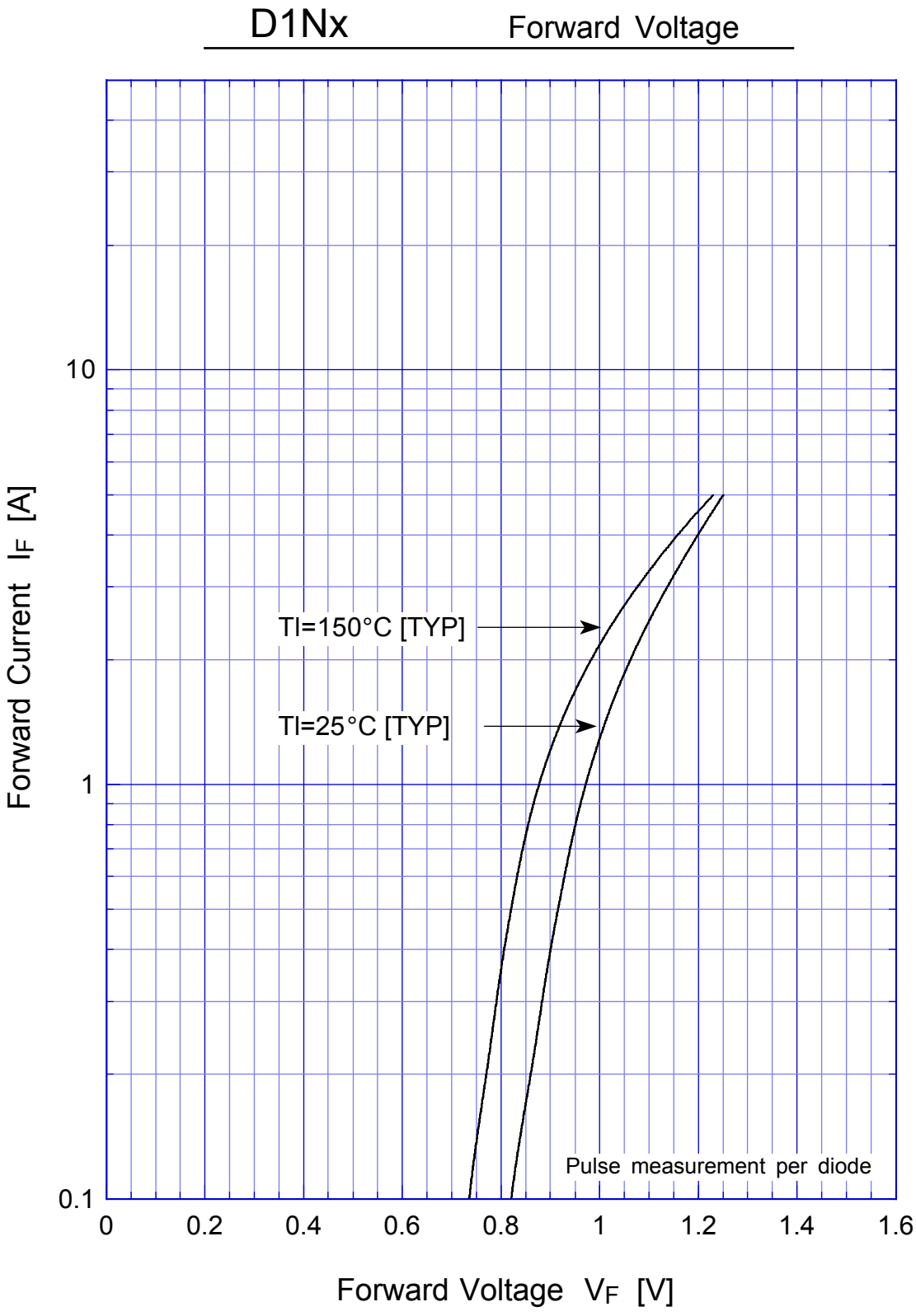
RATINGS

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

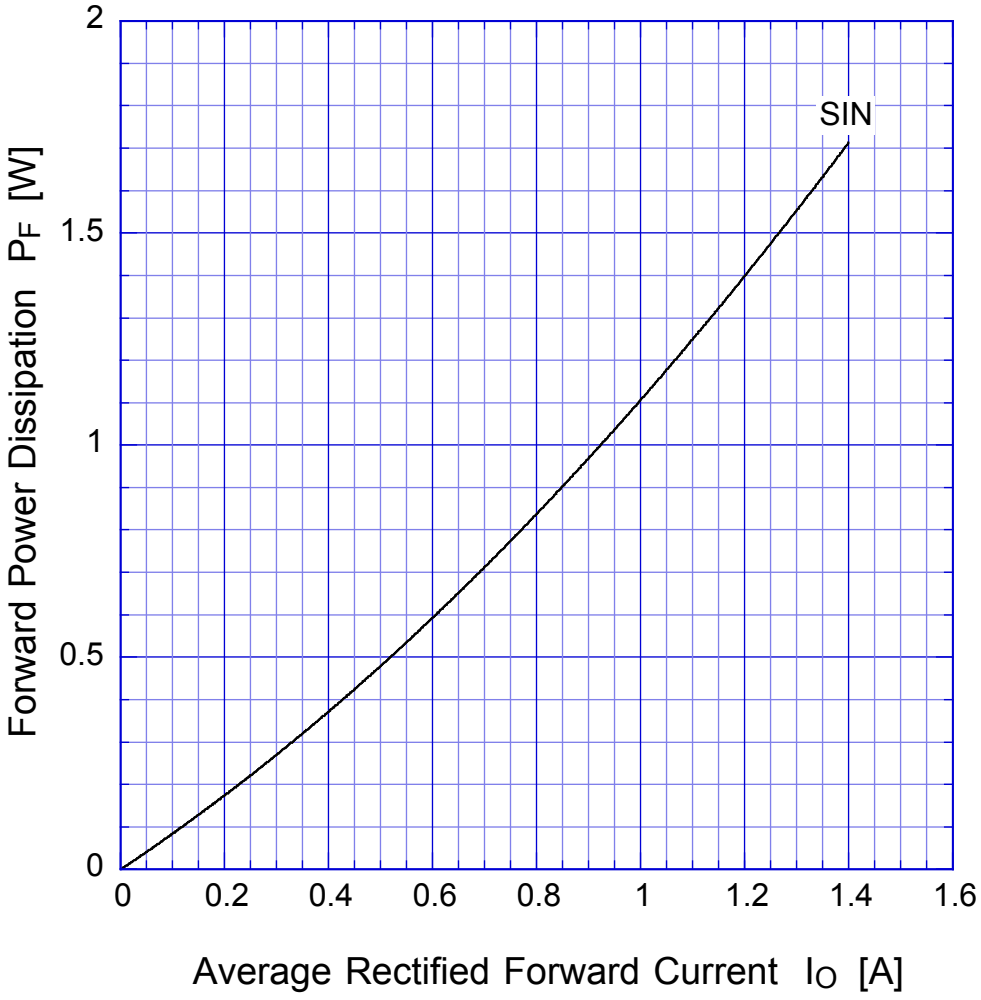
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		−55～150	℃
Operating Junction Temperature	Tj		150	℃
Maximum Reverse Voltage	V_{RM}		200	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, On glass-epoxy substrate Ta=25℃	1	A
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25℃	30	A
Current Squared Time	I^2t	1ms≦t＜10ms Tj=25℃	4.5	A^2s

●Electrical Characteristics (If not specified Tl=25℃)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	IF=1A, Pulse measurement	Max.1.05	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement	Max.10	μA
Thermal Resistance	θ jl	junction to lead	Max.10	℃/W
	θ ja	junction to ambient, On glass-epoxy substrate	Max.113	

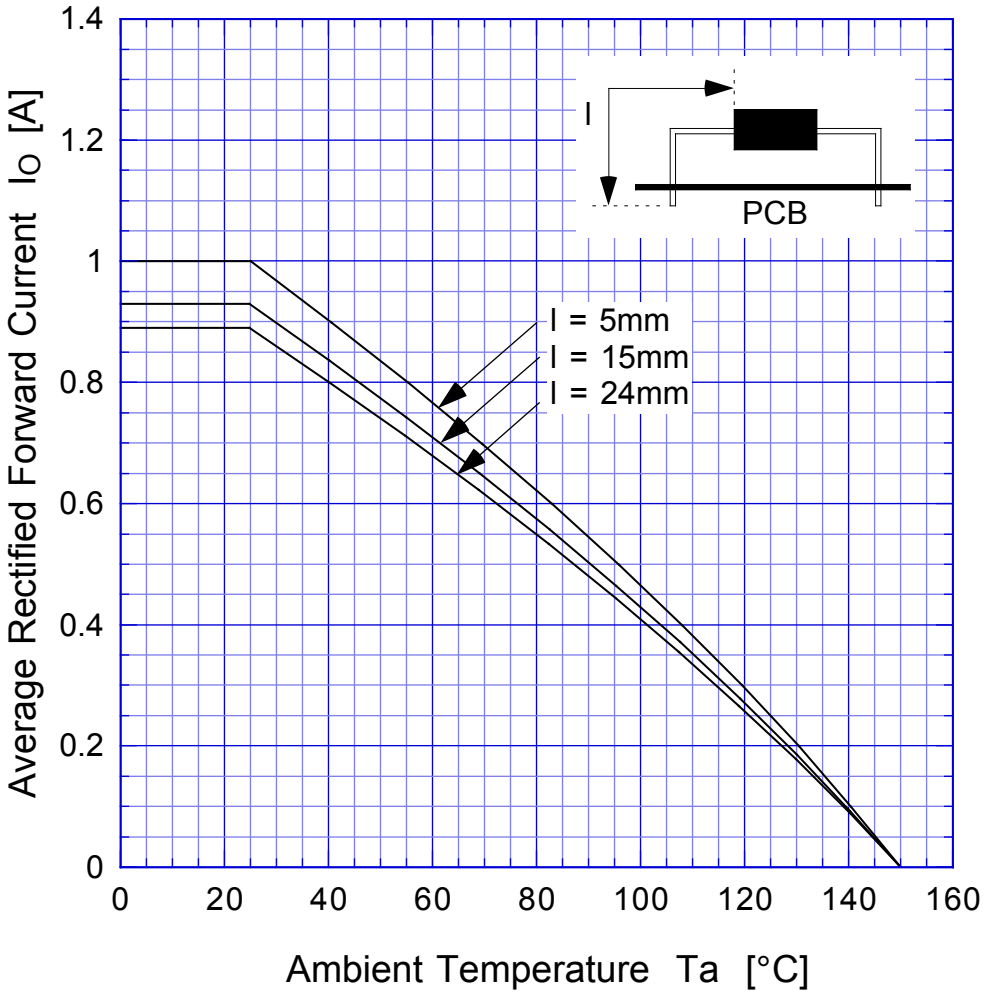

D1Nx
Forward Voltage
10
1
0.1
Forward Current IF [A]
Tl=150°C [TYP]
Tl=25°C [TYP]
Pulse measurement per diode
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
Forward Voltage VF [V]

D1Nx Forward Power Dissipation

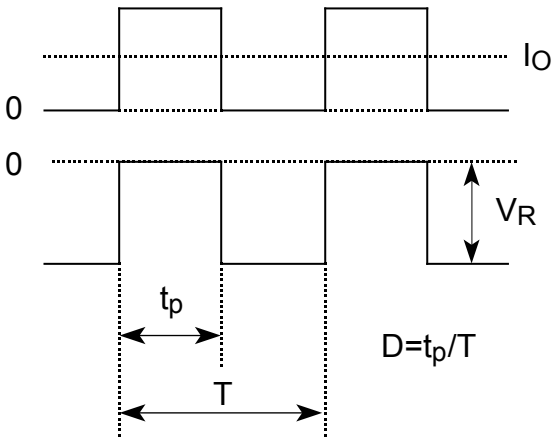


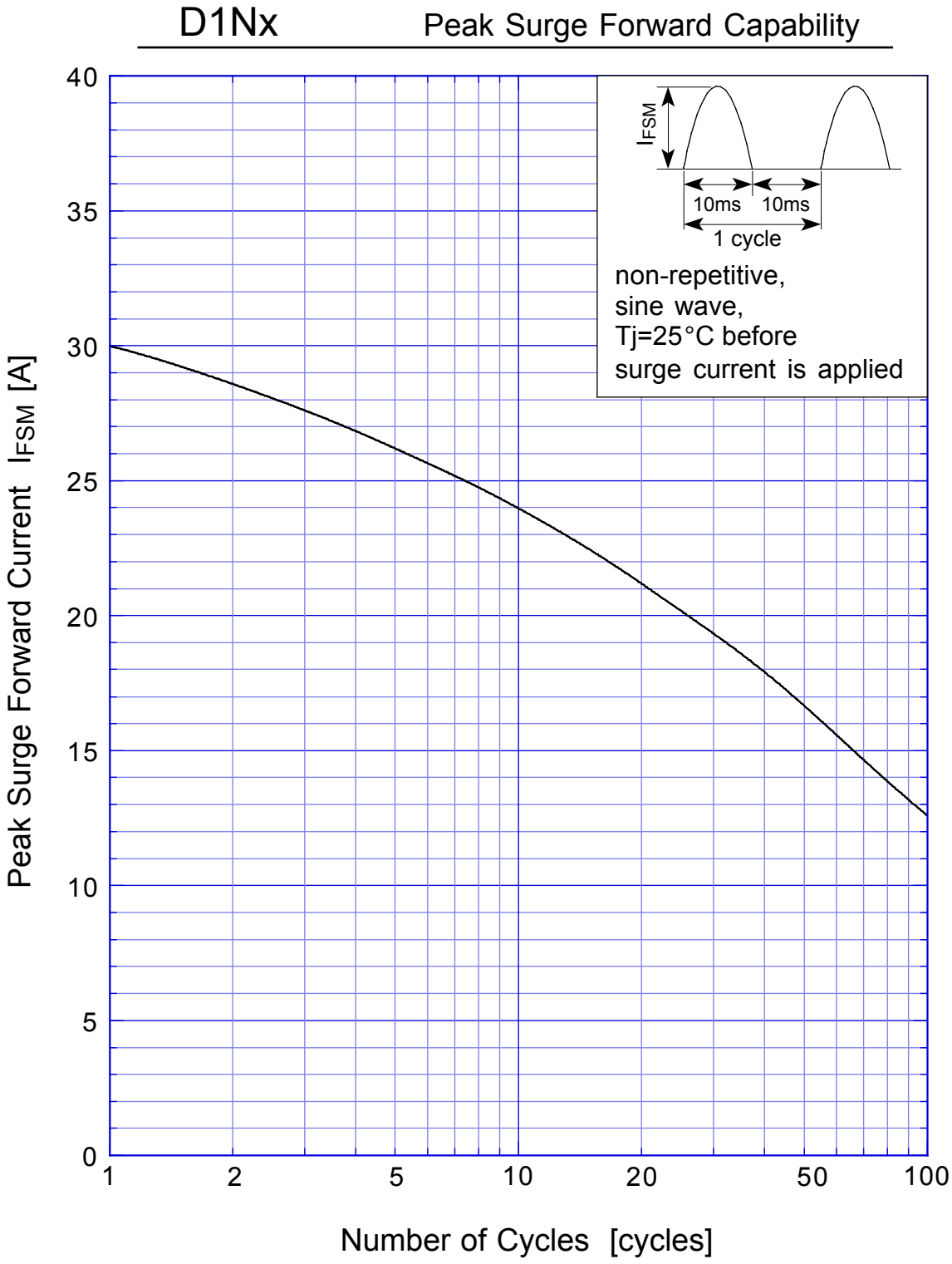
Tj = 150°C
Sine wave

D1Nx Derating Curve



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




D1Nx
Peak Surge Forward Capability
Peak Surge Forward Current IFSM [A]
Number of Cycles [cycles]
0
5
10
15
20
25
30
35
40
1
2
5
10
20
50
100
IFSM
10ms
10ms
1 cycle
non-repetitive,
sine wave,
Tj=25°C before
surge current is applied