SiPower

Power Semiconductor Technology

T1NB (20~80)
Bridge Rectifier

■ Features

- I_o 1.0A
- V_{RRM} 200V~800V
- Glass passivated chip
- High surge forward current capability
- Supersmall size

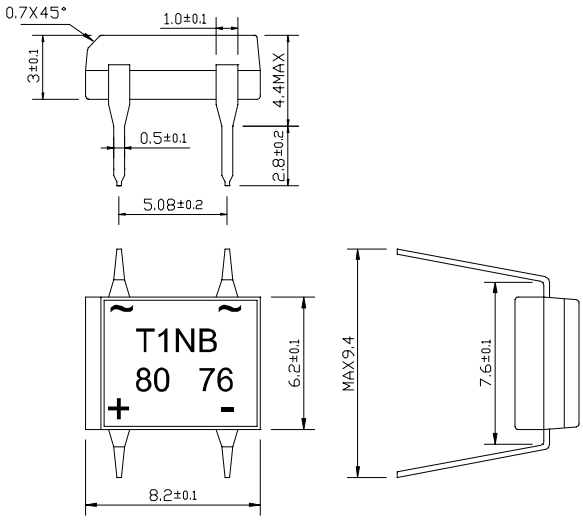
■ Applications

- General purpose 1 phase Bridge rectifier applications

Outline Dimensions and Mark

1N

Unit：mm



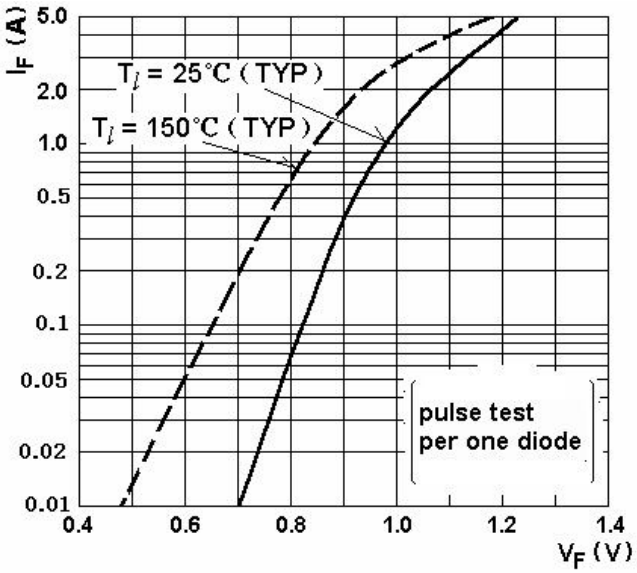
■ Limiting Values（Absolute Maximum Rating）

Item	Symbol	Unit	Conditions	T1NB			
				20	40	60	80
Storage Temperature	T_{stg}	℃		-40 ~ +150			
Junction Temperature	T_j	℃		+150			
Repetitive Peak Reverse Voltage	V_{RRM}	V		200	400	600	800
Average Rectified Output Current	I_o	A	50Hz sine wave, R- load, T_a=25℃	1			
Surge(Non-repetitive)Forward Current	I_{FSM}	A	50Hz sine wave, 1 cycle, T_a=25℃	30			
Current Squared Time	I^2t	A^2s	1ms≤t＜8.3ms Tj=25℃,Rating of per diode	4			
Current Squared Time	I^2t	A^2s	1ms≤t＜8.3ms T_j=25℃,Rating of per diode	4.5			

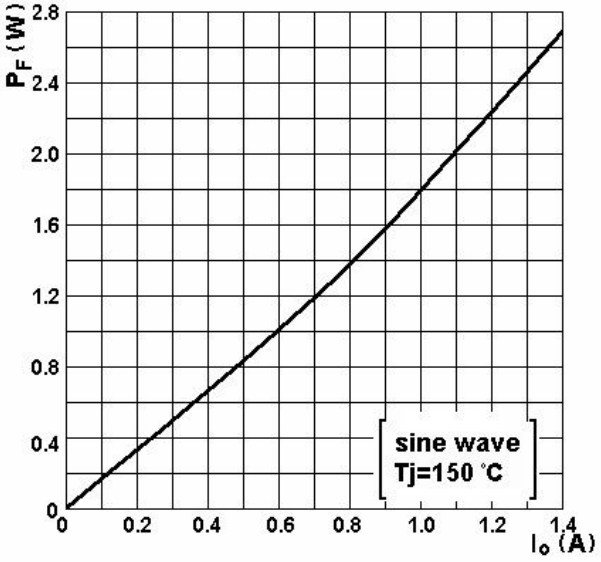
■ Electrical Characteristics（T_a=25℃ Unless otherwise specified）

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	I_{FM}=0.5A, Pulse measurement, Rating of per diode	1.05
Peak Reverse Current	I_{RRM1}	μA	V_{RM}=V_{RRM} , Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	℃/W	Between junction and ambient ,On alumina substrate	68
	$R_{\theta J-L}$		Between junction and lead	15

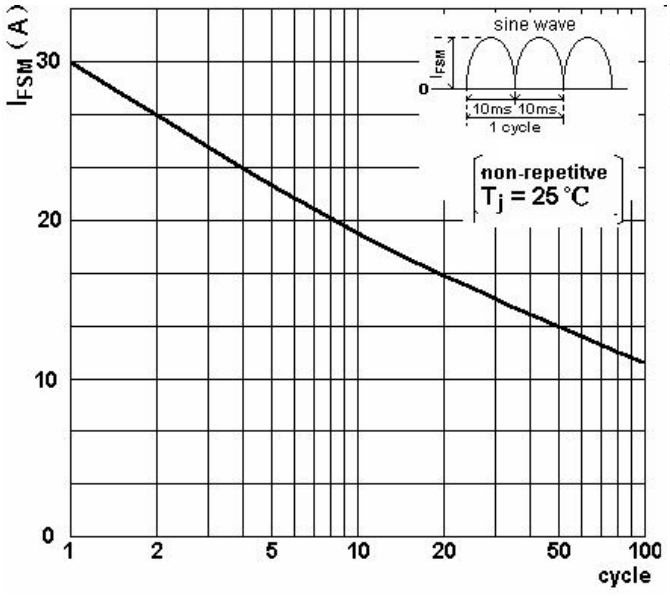
■Characteristics(Typical)



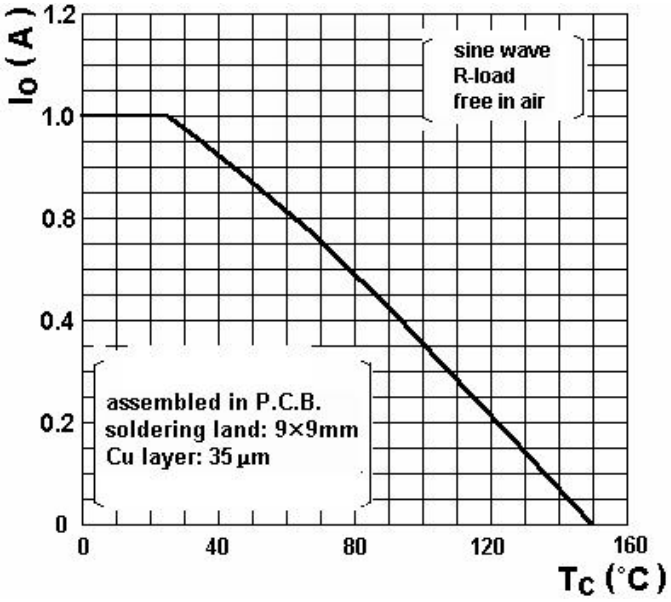
Forward Characteristics



P-I_O Curve



Surge Forward Current Capability



I_O-T_a Curve