SiPower

Power Semiconductor Technology

T1N4001~T1N4007 small chip
General Rectifier Diodes

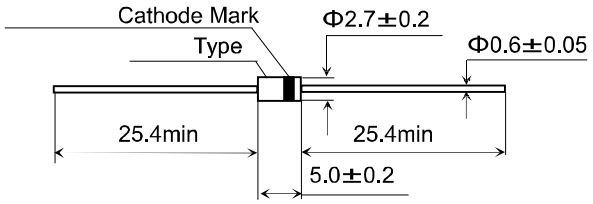
Features

- IF(AV) 1.0A
- VRRM 50V~1000V
- High reliability

Applications

- General purpose rectifier applications

Outline Dimensions and Mark



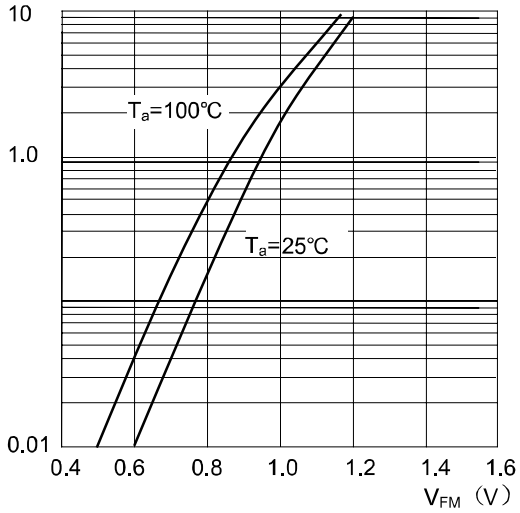
Limiting Values（Absolute Maximum Rating）

Item	Symbol	Unit	T1N						
			4001	4002	4003	4004	4005	4006	4007
Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Peak Working Reverse Voltage	V_{RWM}	V	50	100	200	400	600	800	1000
Non-Repetitive Peak Reverse Voltage	V_{RSM}	V	75	150	220	440	660	880	1100
Average Forward Current	$I_{F(AV)}$	A	1.0 (50Hz Half-sine wave, Resistance load, T_{break}=50℃)						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	30 (50Hz Half-sine wave,1 cycle, T_a=25℃)						
Junction and Storage Temperature	T_j、T_{stg}	℃	-40 ~ +150						
Operating Ambient Temperature	T_a	℃	-40 ~ +150						

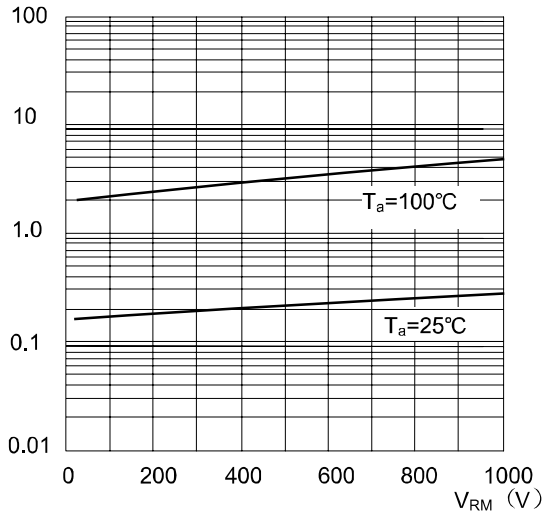
Electrical Characteristics（T_a=25℃ Unless otherwise specified）

Item	Symbol	Unit	Test Condition		Max
Peak Forward Voltage	V_{FM}	V	I_{FM}=1.0A		1.1
Peak Reverse Current	I_{RRM1}	μA	V_{RM}=V_{RRM}	T_a=25℃	10
	I_{RRM2}			T_a=100℃	50
Thermal Resistance (Typical)	$R_{\Theta J-A}$	℃/W	Between junction and ambient		55
	$R_{\Theta J-L}$		Between junction and lead		25

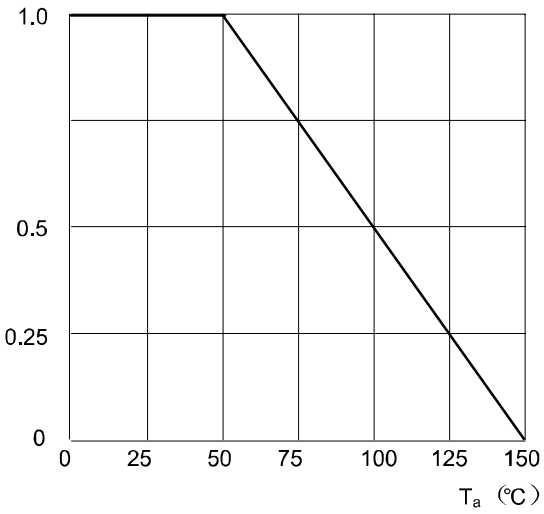
Characteristics(Typical)



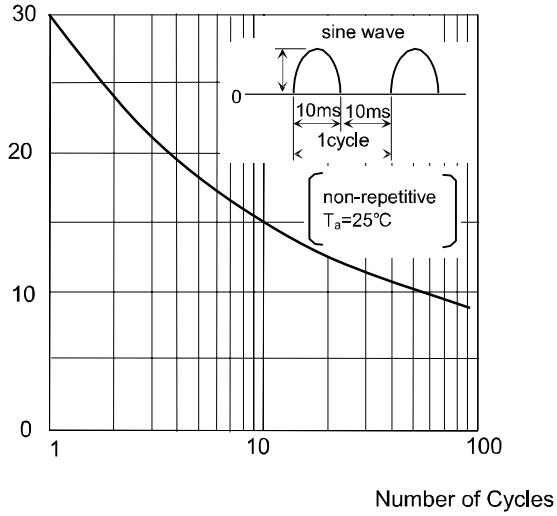
Forward Characteristics



Reverse Characteristics



$I_{F(AV)}$—T_a Derating



Number of Cycles

Surge Forward Current Capability