Features

- Center amplifying gate
- Metal case with ceramic insulator
- Low on-state and switching losses

Typical Applications

- AC controllers
- DC and AC motor control
- Controlled rectifiers

$I_{T(AV)}$	**1500 A**
V_{DRM}/V_{RRM}	**1100~1800V**
I_{TSM}	**25 kA**
I^2t	**3380 10^3A^2S**

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j(℃)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled, T_C=70℃	125			1500	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms	125	1100		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			100	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=0.6V_{RRM}	125			25	kA
I^2t	I^2t for fusing coordination					3125	A^2s*10^3
V_{TO}	Threshold voltage		125			0.95	V
r_T	On-state slope resistance					0.18	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=4700A, F=24kN	25			1.70	V
dv/dt	Critical rate of rise of off-state voltage	V_{DM}=0.67V_{DRM}	125			1000	V/μs
di/dt	Critical rate of rise of on-state current	V_{DM}= 67%V_{DRM} to 2500A, Gate pulse t_r ≤0.5μs I_{GM}=1.5A	125			200	A/μs
Q_{rr}	Recovery charge	I_{TM}=2000A,tp=2000μs, di/dt=-20A/μs, V_R =50V	125		1500		μC
I_{GT}	Gate trigger current	V_A=12V, I_A=1A	25	40		200	mA
V_{GT}	Gate trigger voltage			0.8		3.0	V
I_H	Holding current			20		300	mA
V_{GD}	Non-trigger gate voltage	V_{DM}=67%V_{DRM}	125	0.3			V
$R_{th(j-c)}$	Thermal resistance Junction to case	DC· double side cooled Clamping force 24kN				0.019	℃/W
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.005	
F_m	Mounting force			19		26	kN
T_{stg}	Stored temperature			-40		125	℃
W_t	Weight				380		g
Outline	P27						

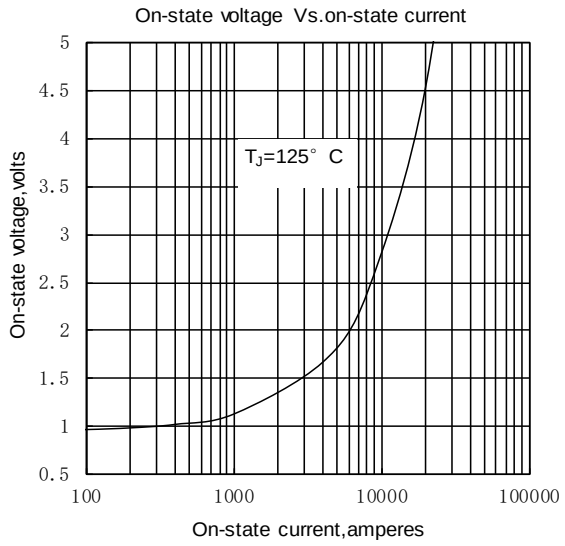


Fig.1

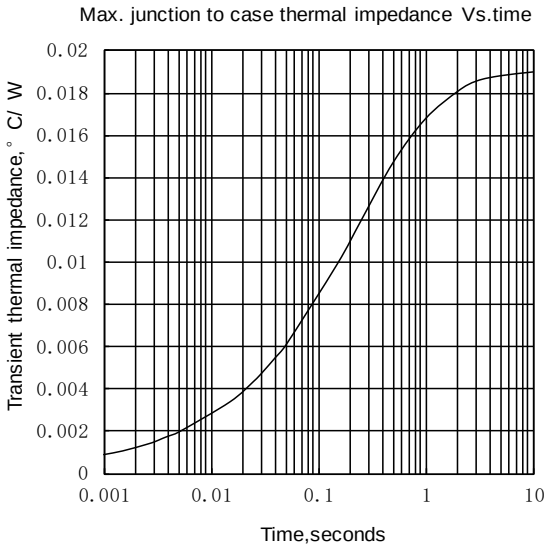


Fig.2

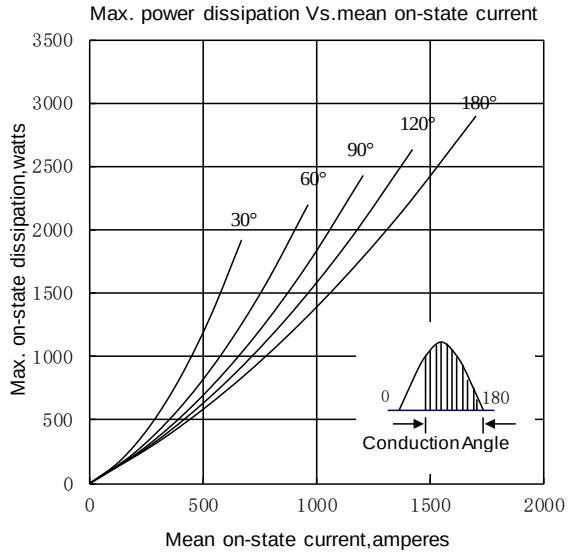


Fig.3

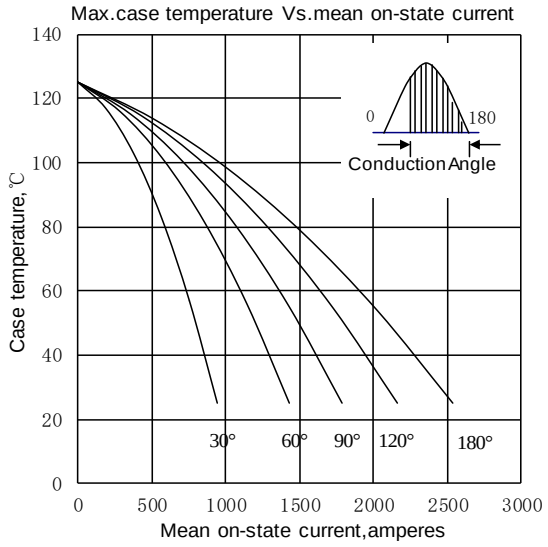


Fig.4

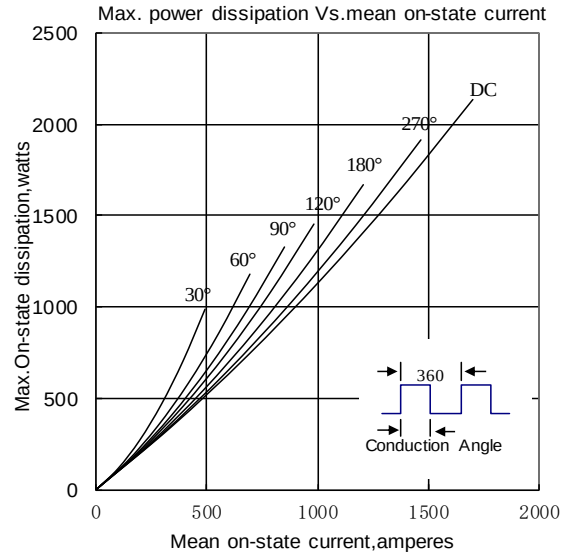


Fig.5

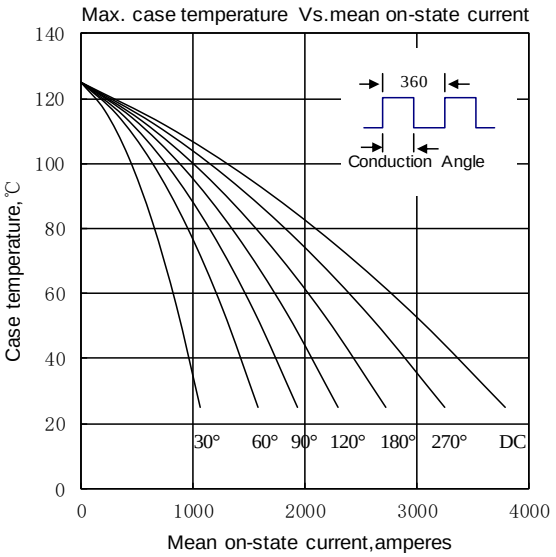


Fig.6

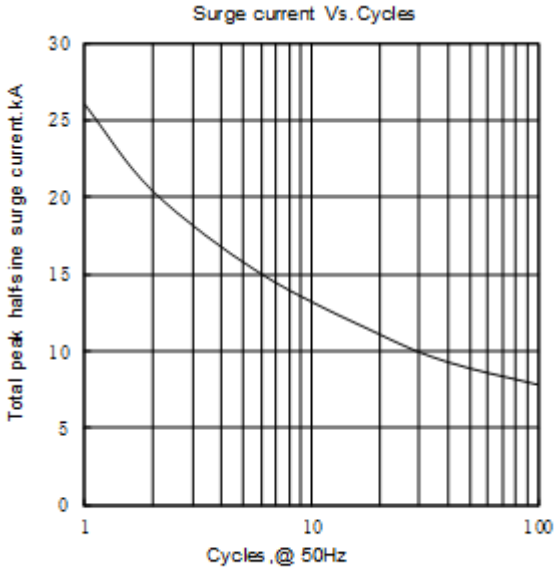


Fig.7

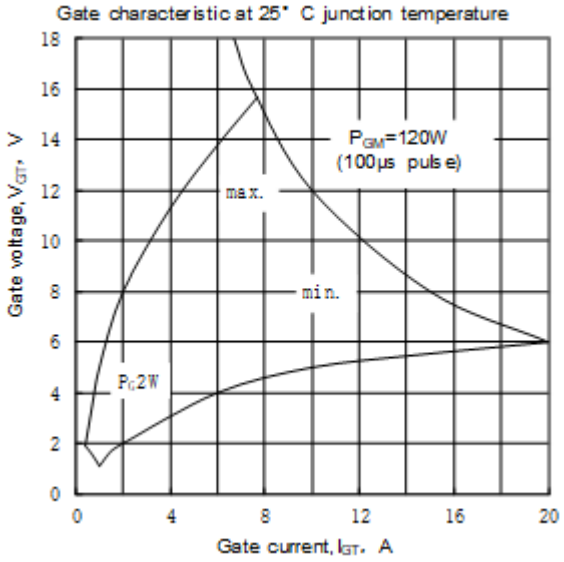


Fig.8

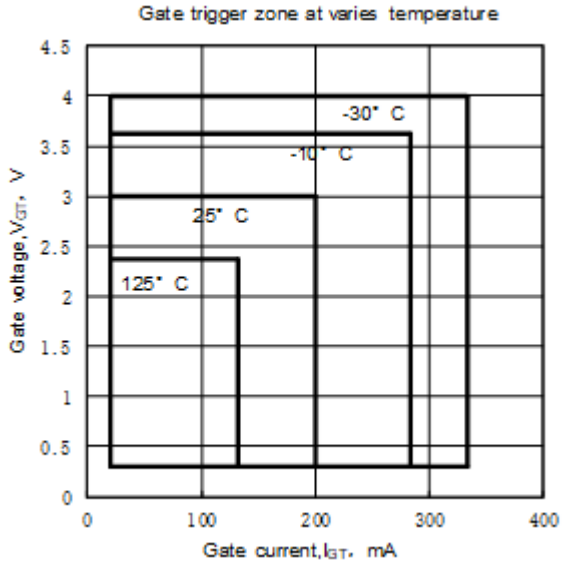
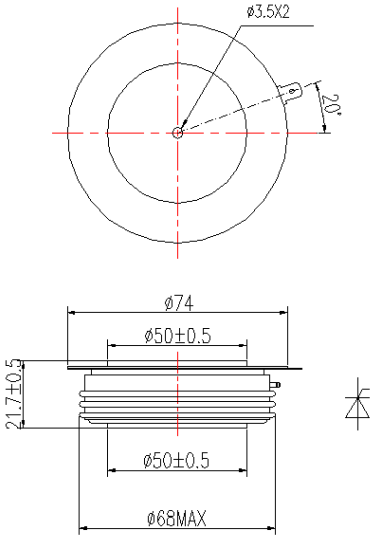


Fig.9



NIps reserves the right to change specifications without notice.