Features :

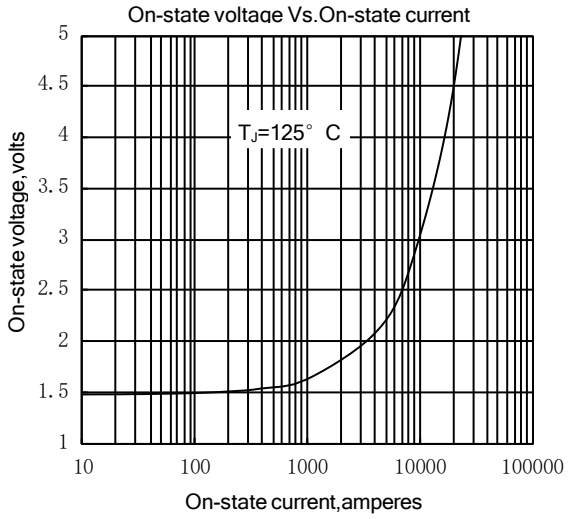
- Center amplifying gate
- Metal case with ceramic insulator
- Low on-state and switching losses

Typical Applications :

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

$I_{T(AV)}$	**2160A**
V_{DRM}/V_{RRM}	**2000 ～ 2500V**
t_q	**40~100μs**
I_{TSM}	**22.7 kA**
I^2t	**2576 10^3A^2S**

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T_j(°C)	VALUE			UNIT
					Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled	T_C=55°C	125			2160	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage	tp=10ms		125	2000		2500	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} tp=10ms at V_{RRM} tp=10ms		125			160	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=0.6V_{RRM}		125			22.7	kA
I^2t	I^2t for fusing coordination						2576	10^3A^2s
V_{TO}	Threshold voltage			125			1.48	V
r_T	On-state slope resistance						0.15	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=4000A, F=35kN		25			3.15	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}, Gate pulse t_r≤0.5μs I_{GM}=1.5A Single pulse		125			1200	A/μs
Q_{rr}	Recovery charge	I_{TM}=2000A, tp=4000μs, di/dt=-20A/μs, V_R=100V		125		1500		μC
tq	Circuit commutated turn-off time	I_{TM}=2000A, tp=4000μs, V_R=100V dv/dt=30V/μs , di/dt=-20A/μs		125	40		100	μs
I_{GT}	Gate trigger current	V_A=12V, I_A=1A		25	40		450	mA
V_{GT}	Gate trigger voltage				0.9		4.5	V
I_H	Holding current				20		1000	mA
I_L	Latching current						1000	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	D.C. double side cooled Clamping force 35kN					0.012	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink						0.003	
F_m	Mounting force				30		40	kN
T_{vj}	Junction temperature				-40		125	°C
T_{stg}	Stored temperature				-40		140	°C
W_t	Weight					880		g
Outline	P14a							



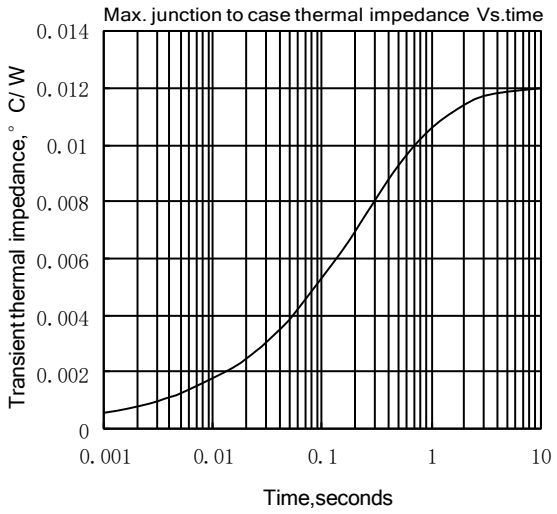


Fig.1

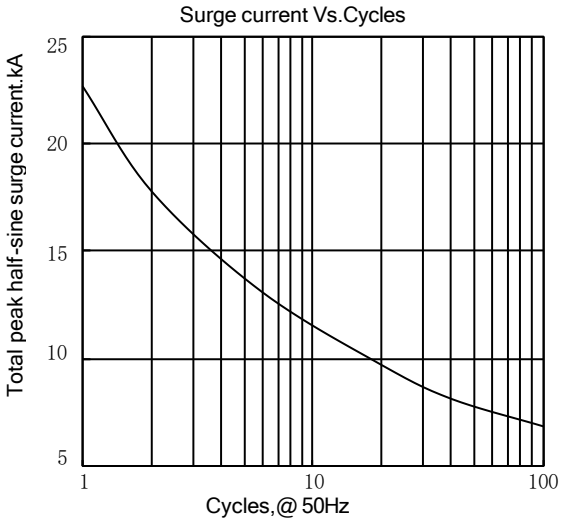


Fig.3

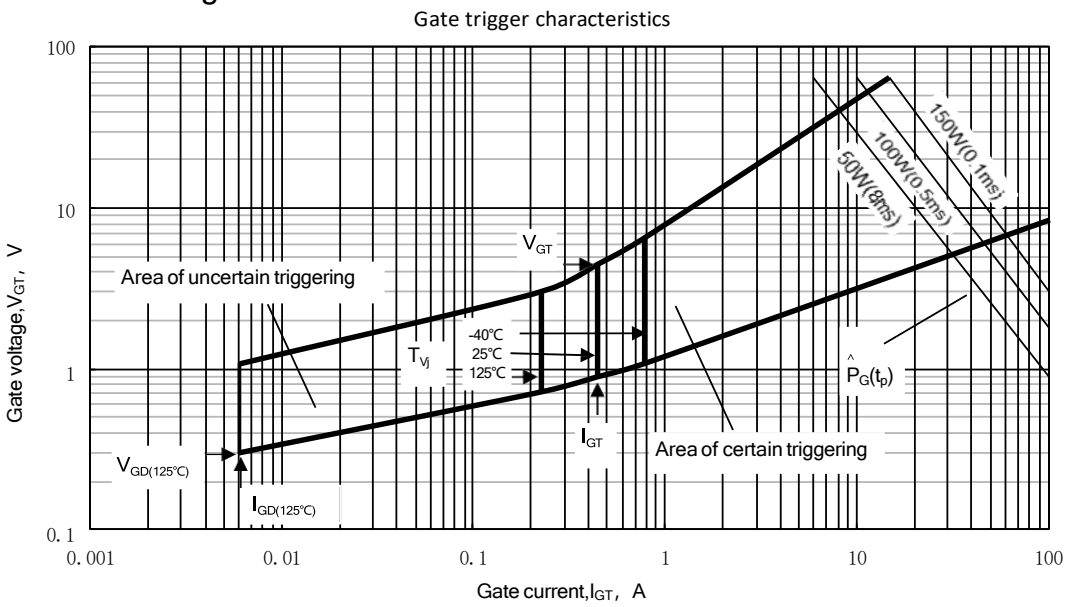
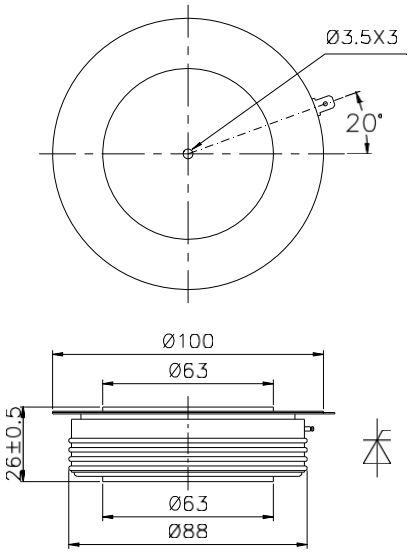


Fig.4

Outline:



NIps reserves the right to change specifications without notice.