

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

$I_{T(AV)}$	2070A
V_{DRM}/V_{RRM}	1900 ~ 3000V
I_{TSM}	28 kA
I^2t	3920 10³A²S

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 =70°C	125			2070	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms		125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}		125			160	mA
I_{TSM}	Surge on-state current	10ms half sine wave		125			28	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$					3920	A ² s*10 ³
V_{TO}	Threshold voltage			125			1.07	V
r_T	On-state slope resistance						0.19	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=4000A, F=35kN$		25			2.30	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 $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$		125			250	A/μs
Q_{rr}	Recovery charge	$I_{TM}=2000A, tp=4000\mu s, di/dt=-20A/\mu s,$ $V_R=100V$		125		2000		μC
I_{GT}	Gate trigger current	$V_A=12V, I_A=1A$		25	40		300	mA
V_{GT}	Gate trigger voltage		0.8			3.0	V	
I_H	Holding current		20			300	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 35.0kN					0.0120	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink						0.0035	
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							

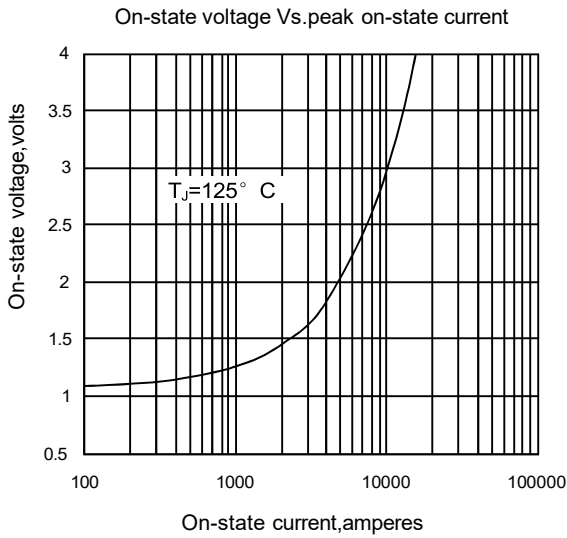


Fig1

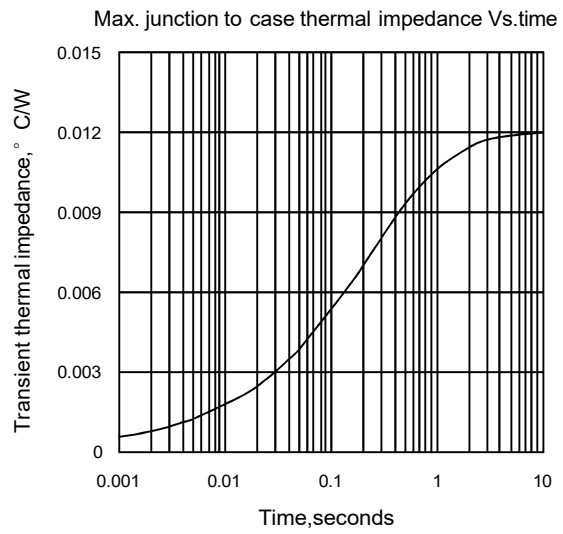


Fig2

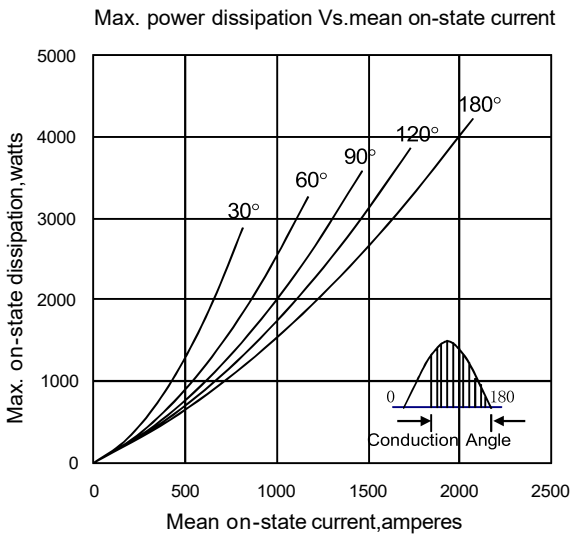


Fig3

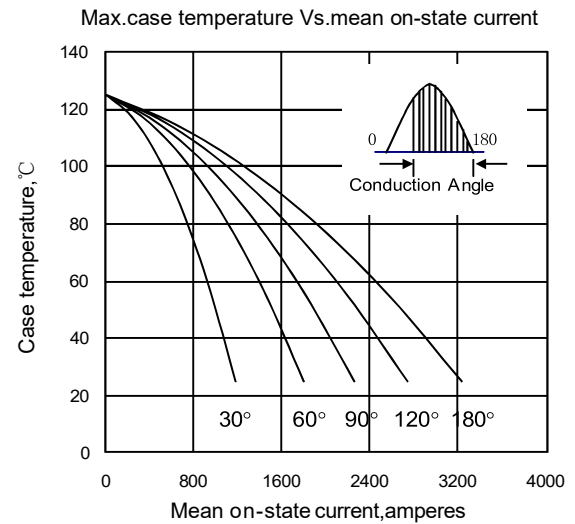


Fig4

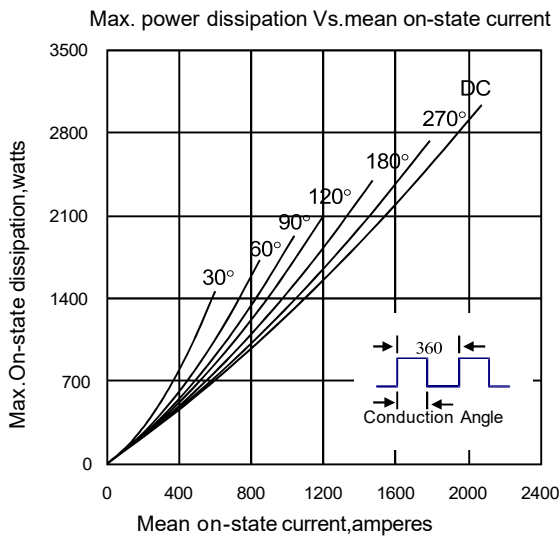


Fig5

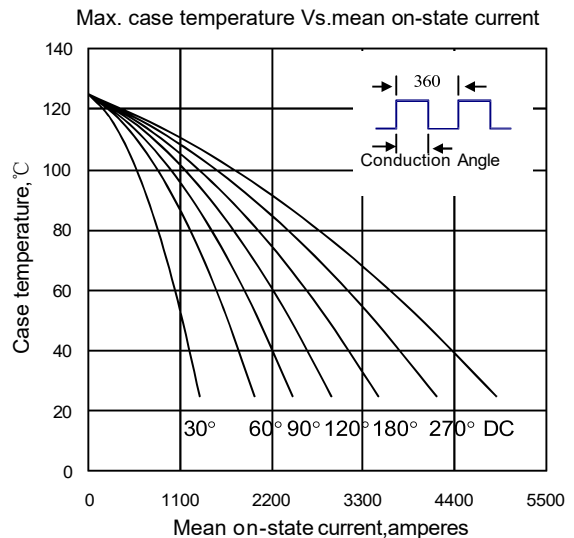


Fig6

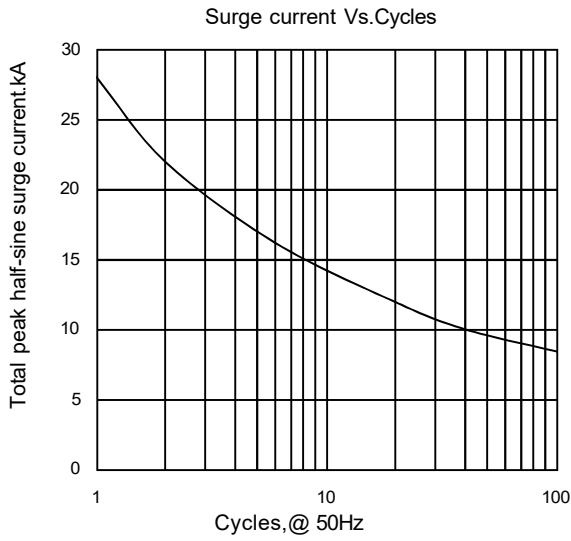


Fig.7

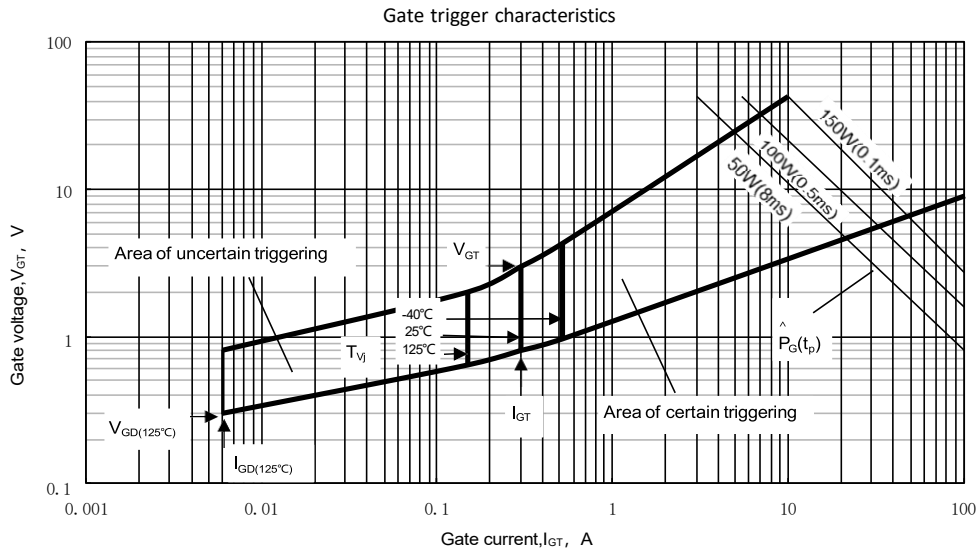
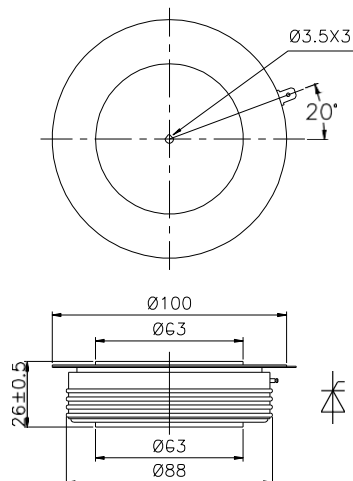


Fig. 8

Outline:



Nlps reserves the right to change specifications without notice.