

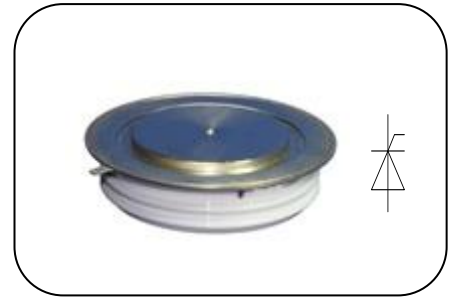
Features

- 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

$I_{T(AV)}$ 1630 A
 V_{DRM}/V_{RRM} 4300-5200V
 I_{TSM} 18 kA
 I^2t $10^3 A^2S$



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled,	$T_c=70^{\circ}C$	125		1630	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$t_p=10ms$		125	4300	5200	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}		125		200	mA
I_{TSM}	Surge on-state current	10ms half sine wave		125		17.5	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				1531	$A^2s \cdot 10^3$
V_{TO}	Threshold voltage			125		1.25	V
r_T	On-state slope resistance					0.39	m Ω
V_{TM}	Peak on-state voltage	$I_{TM}=3000A, F=40kN$		25		3.00	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 3000A, Gate pulse $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$		125		250	A/ μs
Q_{rr}	Recovery charge	$I_{TM}=2000A, t_p=2000\mu s, di/dt=-20A/\mu s,$ $V_R =50V$		125		3000	μC
I_{GT}	Gate trigger current			25	40	300	mA
V_{GT}	Gate trigger voltage	$V_A=12V, I_A=1A$			0.8	3.0	V
I_H	Holding current				20	250	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 40.0kN				0.012	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.003	
F_m	Mounting force				30	40	kN
T_{stg}	Stored temperature				-40	140	$^{\circ}C$
W_t	Weight					820/ 880	g
Outline	P15						

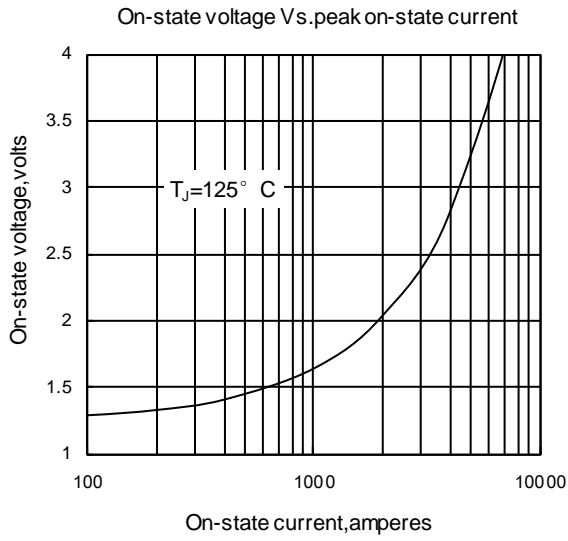


Fig1

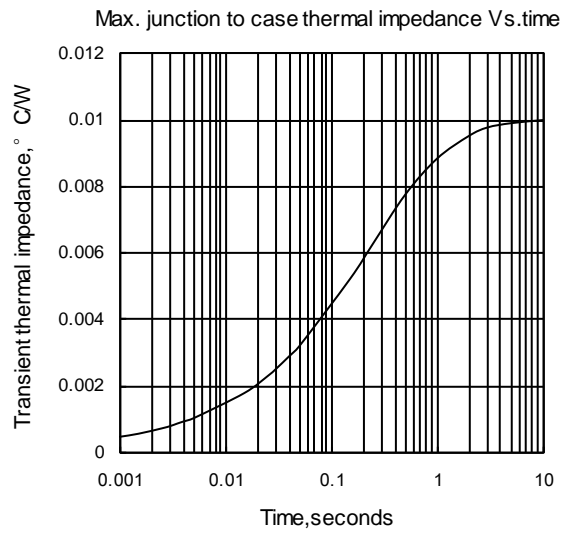


Fig2

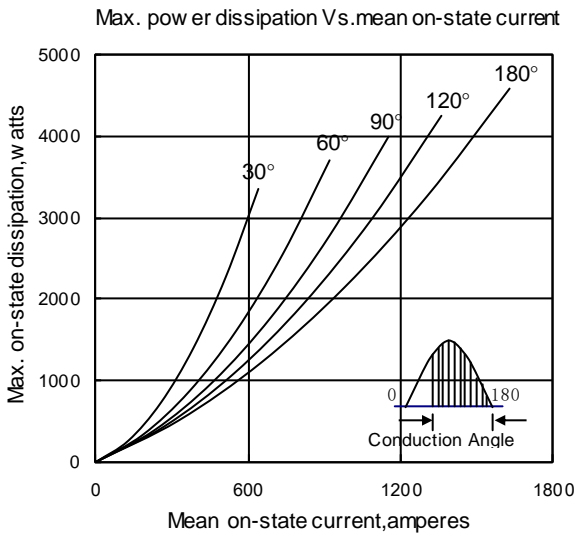


Fig3

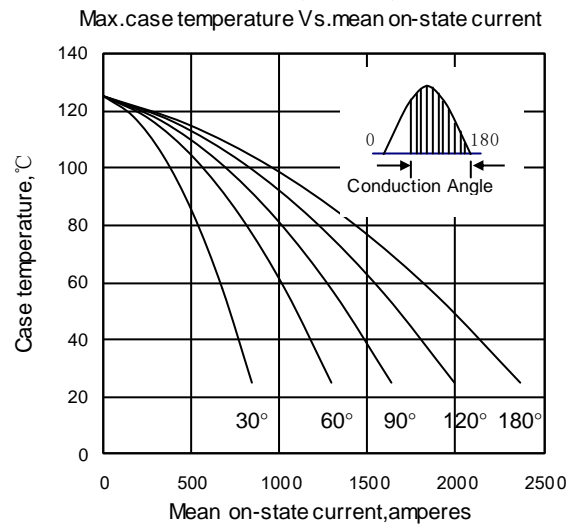


Fig4

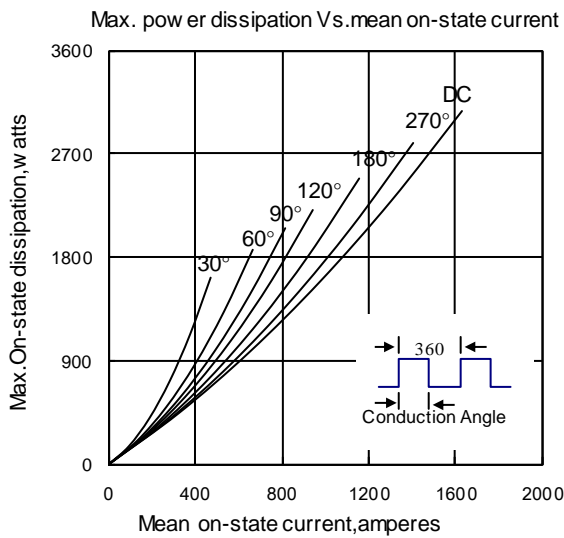


Fig5

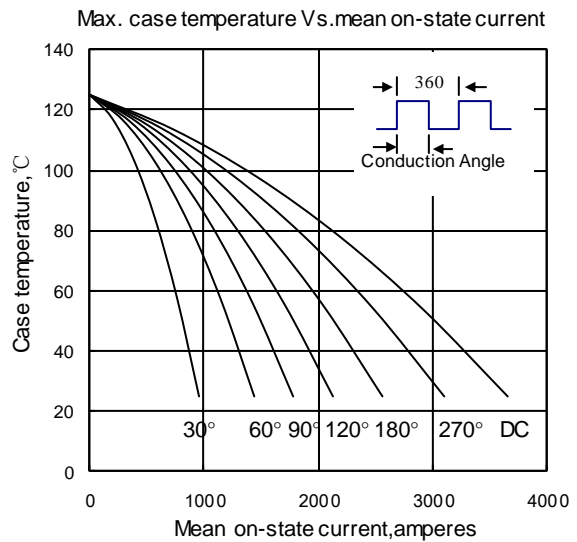


Fig6

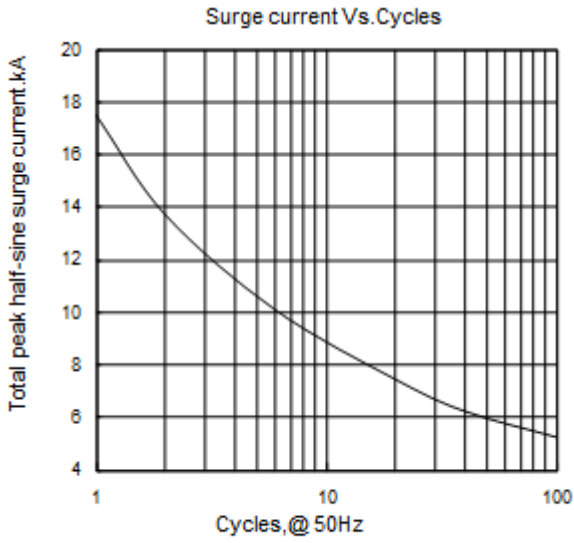


Fig7

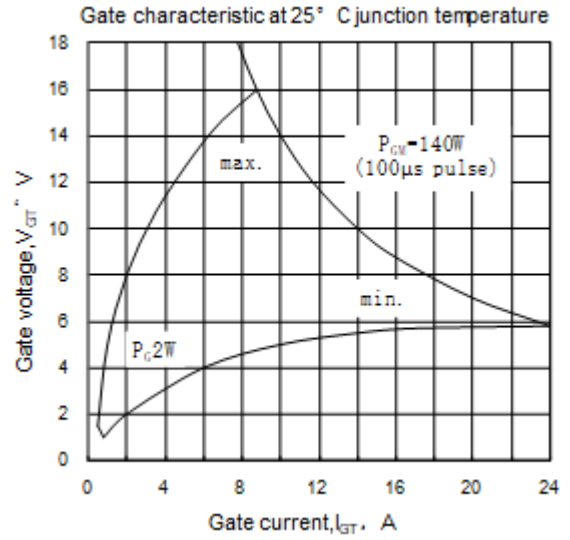


Fig8

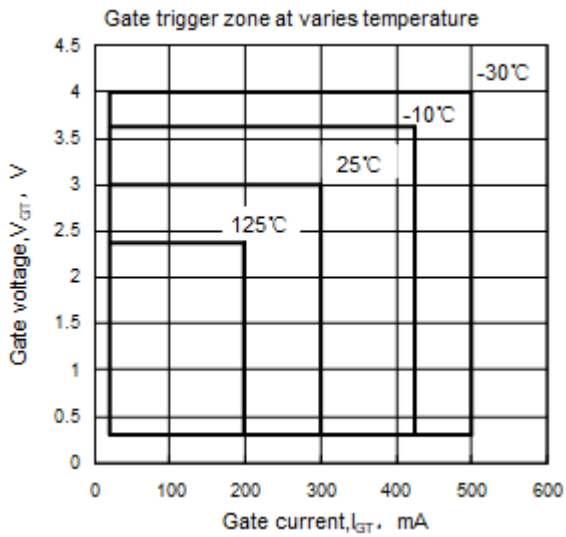
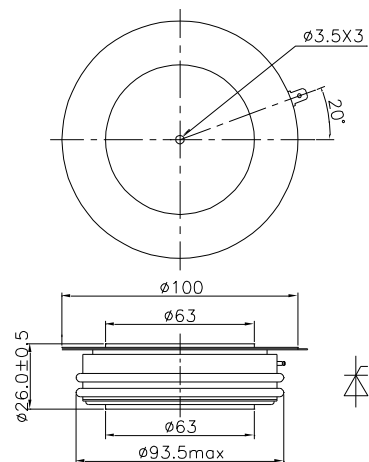


Fig9



Nlps reserves the right to change specifications without notice.