

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

$I_{T(AV)}$	890A
V_{DRM}/V_{RRM}	1100 ~ 1800V
I_{TSM}	11 kA
I^2t	605 10³A²S

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		890	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$t_p=10ms$		125	1100	1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}		125		40	mA
I_{TSM}	Surge on-state current	10ms half sine wave		125		11	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				605	A ² s*10 ³
V_{TO}	Threshold voltage			125		0.85	V
r_T	On-state slope resistance					0.42	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=1500A, F=15kN$		25		2.00	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 1300A, Gate pulse $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$		125		100	A/μs
Q_{rr}	Recovery charge	$I_{TM}=1000A, t_p=4000\mu s, di/dt=-20A/\mu s,$ $V_R=100V$		125	1100		μC
I_{GT}	Gate trigger current	$V_A=12V, I_A=1A$		25	35	300	mA
V_{GT}	Gate trigger voltage		0.8		2.5	V	
I_H	Holding current		20		250	mA	
I_L	Latching current				500	mA	
V_{GD}	Non-trigger gate voltage	$V_{DM}=0.67V_{DRM}$		125		0.3	V
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. double side cooled Clamping force 15kN				0.035	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.008	
F_m	Mounting force				10	20	kN
T_{vj}	Junction temperature				-40	125	°C
T_{stg}	Stored temperature				-40	140	°C
W_t	Weight					150	g
Outline	P04						

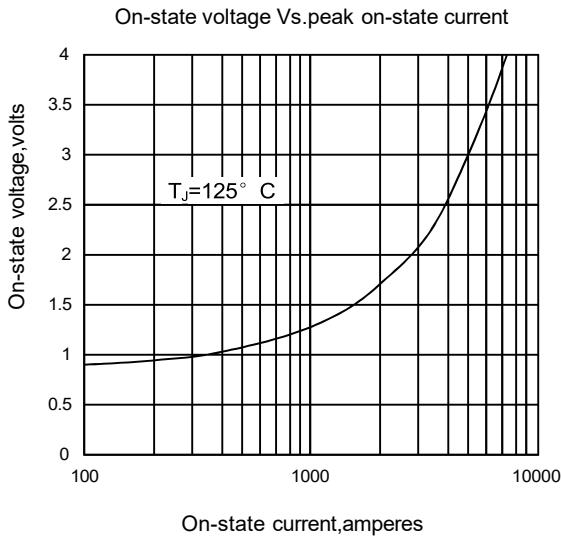


Fig1

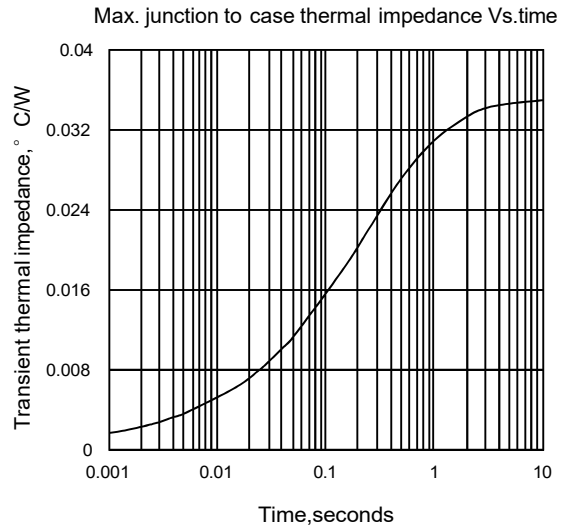


Fig2

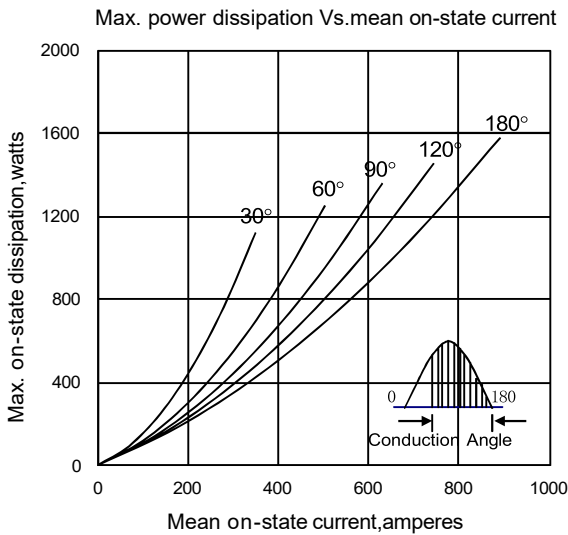


Fig3

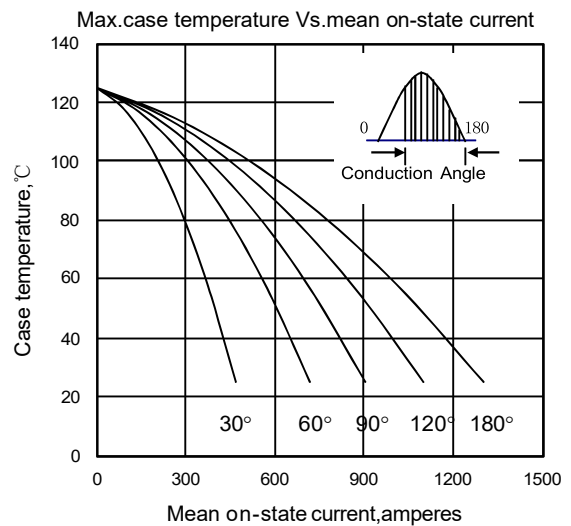


Fig4

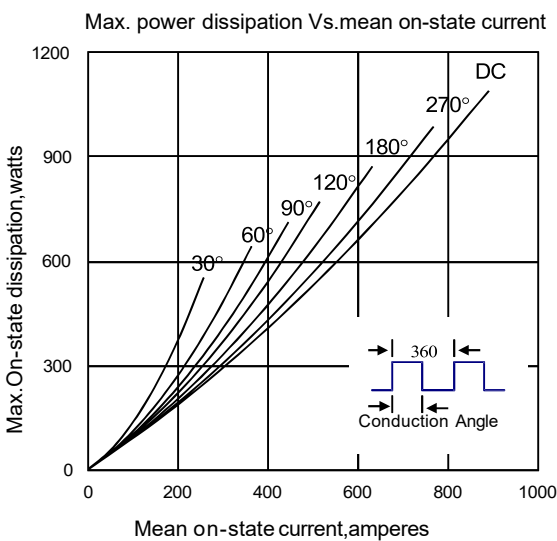


Fig5

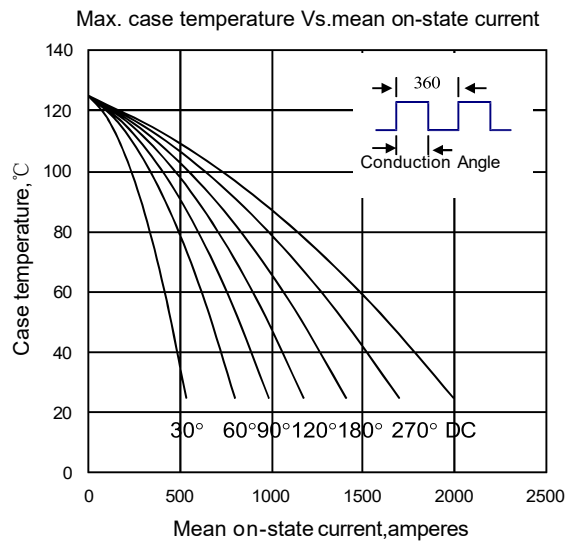


Fig6

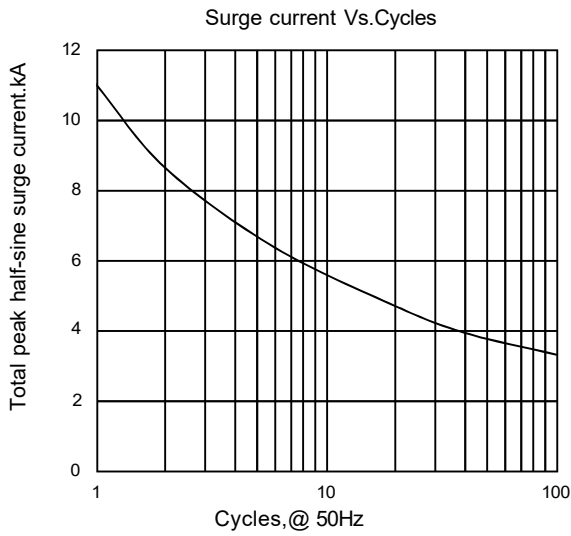


Fig7

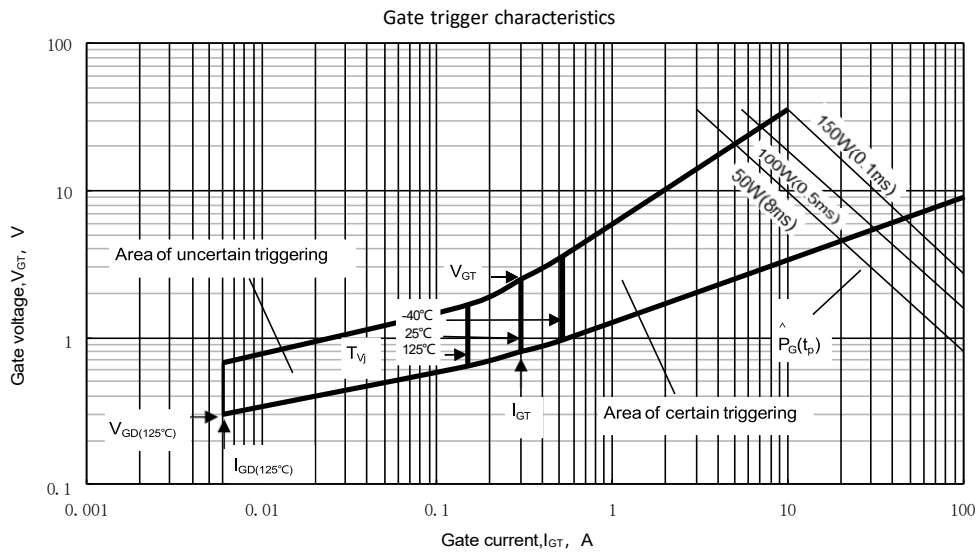
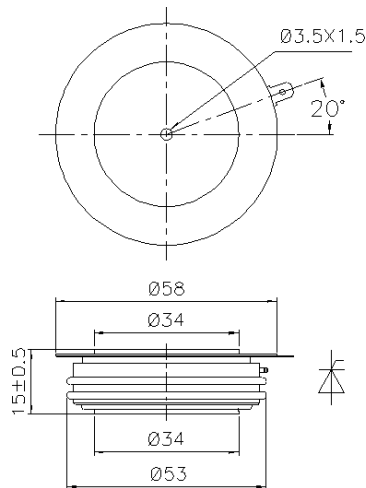


Fig. 8

Outline:



Nlps reserves the right to change specifications without notice.