

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

品名 : FH1100T**

$I_{T(AV)}$	1100A
V_{DRM}, V_{RRM}	3600V 3800V
	4000V 4200V
	4500V



SYMBOL	CHARACTERISTIC	TEST CONDITIONS		$T_j(^{\circ}\text{C})$	VALUE			UNIT
					Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled	$T_C=70^{\circ}\text{C}$	125			1100	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$t_p=10\text{ms}$		125	3600		4500	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 $V_R=0.6V_{RRM}$		125			15	kA
I^2t	I^2t for fusing coordination						1125	$10^3\text{A}^2\text{s}$
V_{TO}	Threshold voltage			125			1.0	V
r_T	On-state slope resistance						0.5	$\text{m}\Omega$
V_{TM}	Peak on-state voltage	$I_{TM}=1500\text{A}, F=24\text{kN}$		25			1.75	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=0.67V_{DRM}$		125			1000	$\text{V}/\mu\text{s}$
di/dt	Critical rate of rise of on-state current	$V_{DM}=67\%V_{DRM}$, Gate pulse $t_r \leq 0.5\mu\text{s}$ $I_{GM}=1.5\text{A}$		125			100	$\text{A}/\mu\text{s}$
Q_{rr}	Recovery charge	$I_{TM}=2000\text{A}, t_p=4000\mu\text{s}, di/dt=-20\text{A}/\mu\text{s}$, $V_R=50\text{V}$		125		1800		μC
I_{GT}	Gate trigger current	$V_A=12\text{V}, I_A=1\text{A}$		25	40		300	mA
V_{GT}	Gate trigger voltage				0.8		3.0	V
I_H	Holding current				25		200	mA
I_L	Latching current						1500	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					0.020	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Clamping force 24kN					0.005	
F_m	Mounting force				19		26	kN
T_{vj}	Junction temperature				-40		125	$^{\circ}\text{C}$
T_{stg}	Stored temperature				-40		140	$^{\circ}\text{C}$
W_t	Weight					440		g
Outline	P11a							

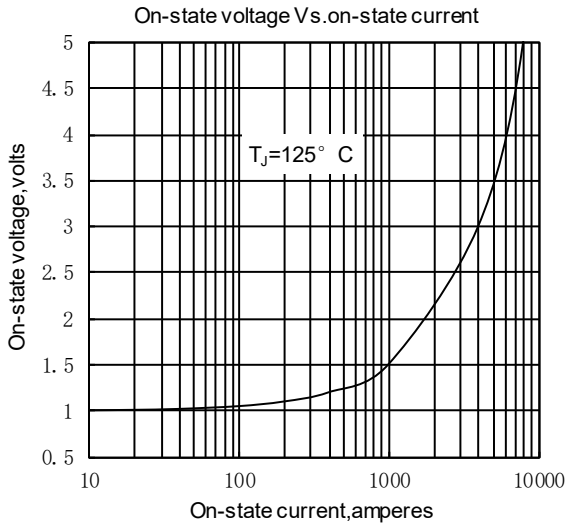


Fig.1

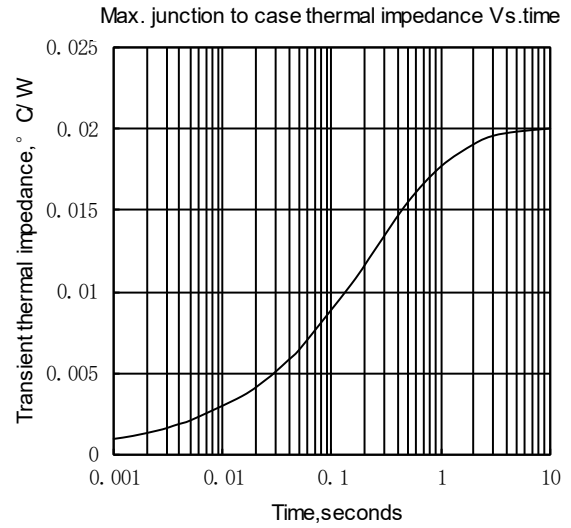


Fig.2

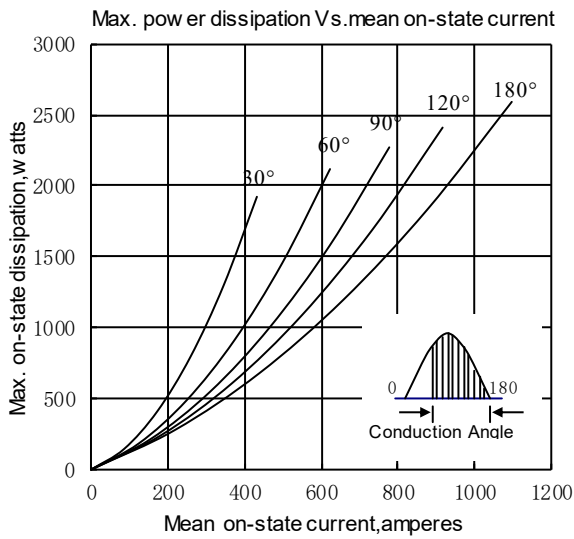


Fig.3

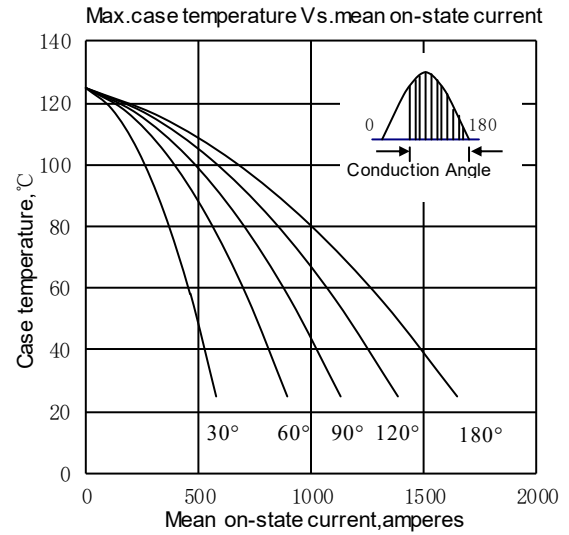


Fig.4

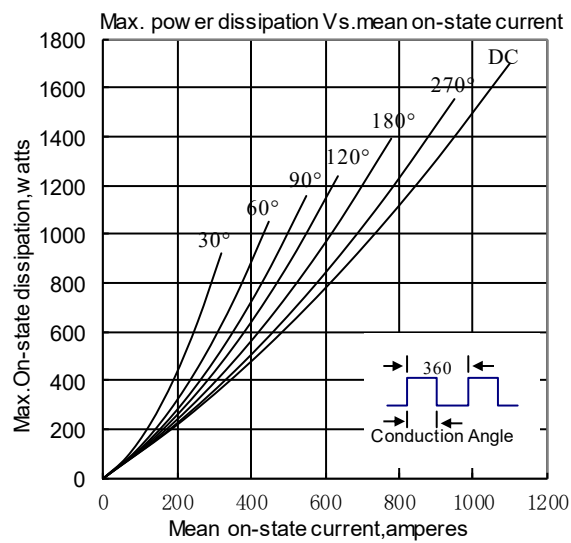


Fig.5

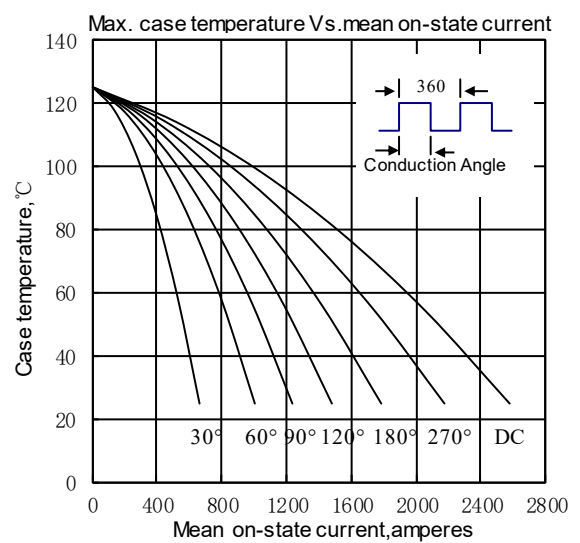


Fig.6

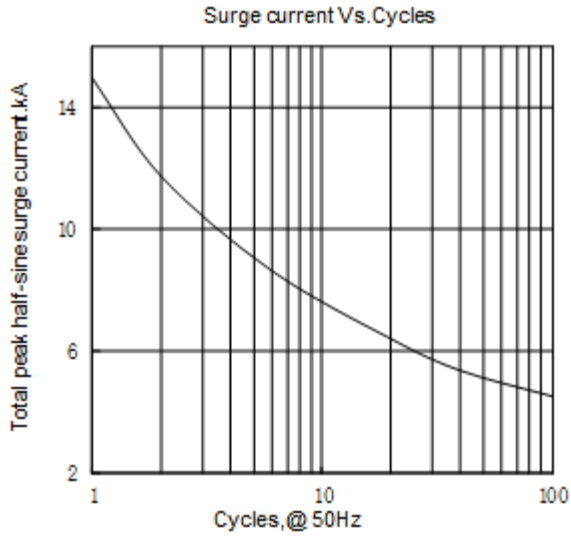


Fig.7

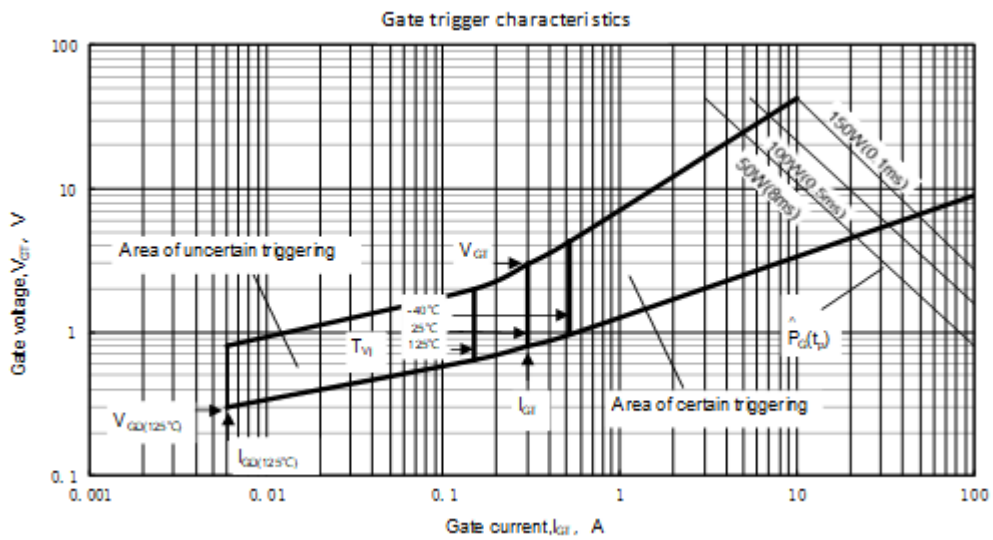
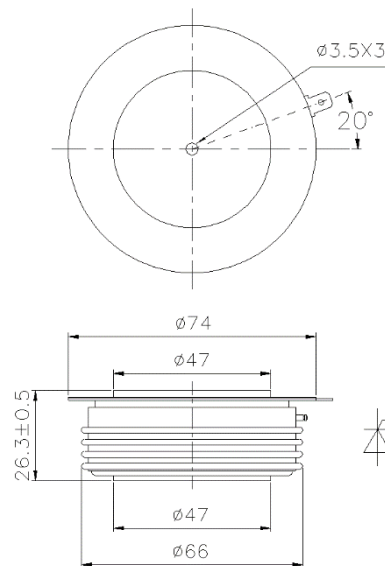


Fig.8



Nlps reserves the right to change specifications without notice.