

**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

$I_{T(AV)}$       **650 A**  
 $V_{DRM}/V_{RRM}$     **6600-7200V**  
 $I_{TSM}$             **10.5 kA**  
 $I^2t$                 **551 10<sup>3</sup>A<sup>2</sup>S**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>i</sub> (°C)	VALUE			UNIT	
				Min		Max		
I <sub>T(AV)</sub>	Mean on-state current	180° half sine wave 50Hz Double side cooled	T <sub>C</sub> =70°C	125		650	A	
V <sub>DRM</sub> V <sub>RRM</sub>	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms		125	6600	7200	V	
I <sub>DRM</sub> I <sub>RRM</sub>	Repetitive peak current	at V <sub>DRM</sub> at V <sub>RRM</sub>		125		200	mA	
I <sub>TSM</sub>	Surge on-state current	10ms half sine wave		125		10.5	kA	
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				551	A <sup>2</sup> s*10 <sup>3</sup>	
V <sub>TO</sub>	Threshold voltage			125		1.28	V	
r <sub>T</sub>	On-state slope resistance					1.32	mΩ	
V <sub>TM</sub>	Peak on-state voltage	I <sub>TM</sub> =1000A, F=24kN		125		2.90	V	
dv/dt	Critical rate of rise of off-state voltage	V <sub>DM</sub> =0.67V <sub>DRM</sub>		125		2000	V/μs	
di/dt	Critical rate of rise of on-state current	V <sub>DM</sub> = 67%V <sub>DRM</sub> to 2000A, Gate pulse t <sub>r</sub> ≤0.5μs I <sub>GM</sub> =1.5A		125		100	A/μs	
Q <sub>rr</sub>	Recovery charge	I <sub>TM</sub> =2000A, tp=2000μs, di/dt=-5A/μs, V <sub>R</sub> =50V		125		2900	μC	
I <sub>GT</sub>	Gate trigger current				30	300	mA	
V <sub>GT</sub>	Gate trigger voltage	V <sub>A</sub> =12V, I <sub>A</sub> =1A		25	0.8	3.0	V	
I <sub>H</sub>	Holding current				25	200	mA	
V <sub>GD</sub>	Non-trigger gate voltage	V <sub>DM</sub> =0.67V <sub>DRM</sub>		125	0.3		V	
R <sub>th(j-C)</sub>	Thermal resistance Junction to case	DC: double side cooled				0.022	°C/W	
R <sub>th(C-h)</sub>	Thermal resistance case to heatsink	Clamping force 24kN				0.005	°C/W	
F <sub>m</sub>	Mounting force				19	24	26	kN
T <sub>stg</sub>	Stored temperature				-40	140	°C	
W <sub>t</sub>	Weight					560	g	
Outline								

P24

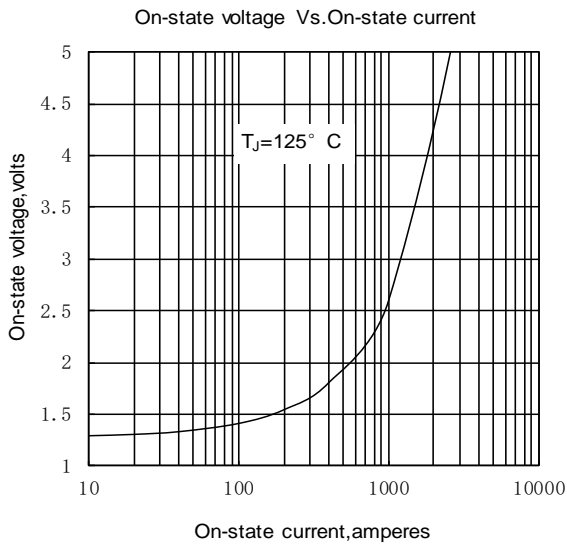


Fig.1

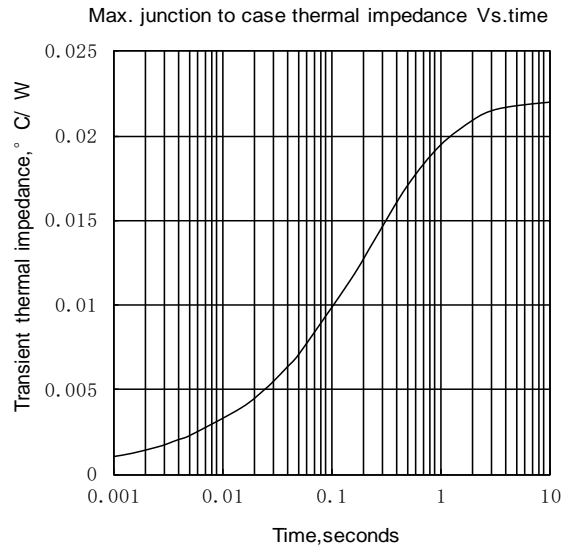


Fig.2

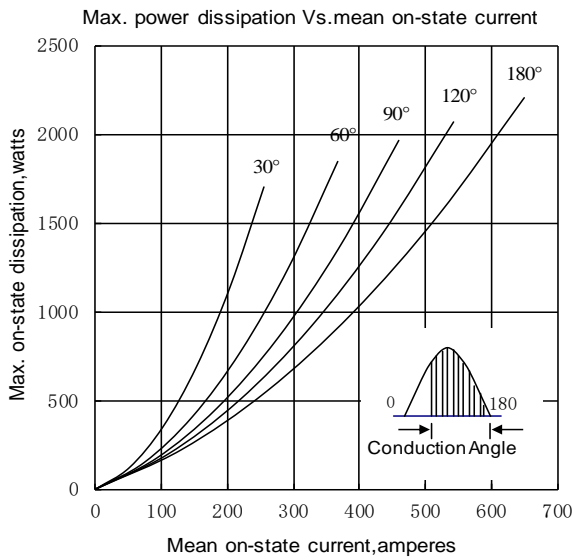


Fig.3

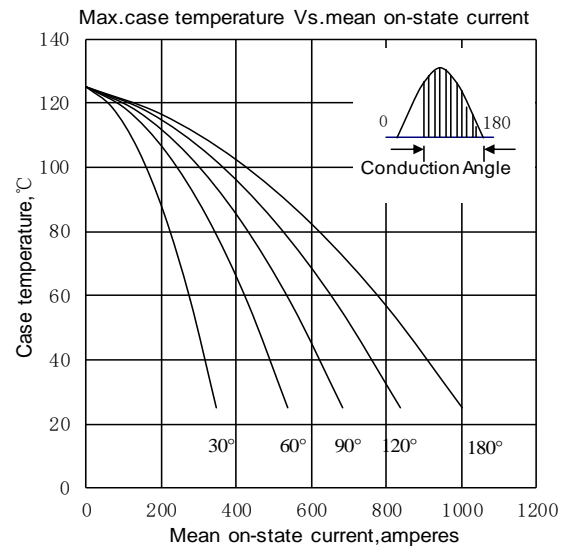


Fig.4

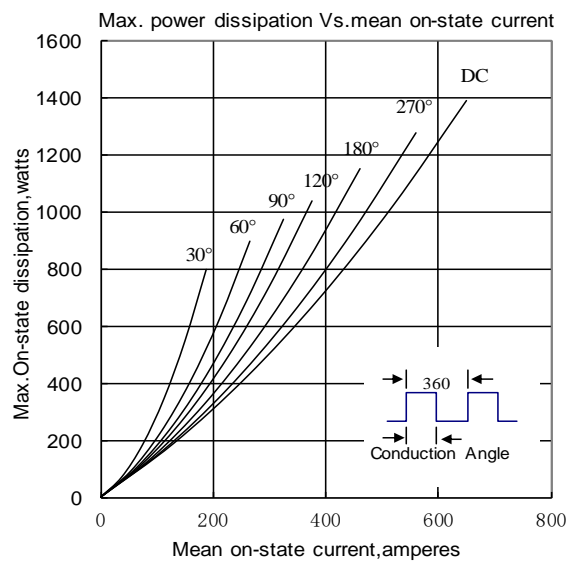


Fig5

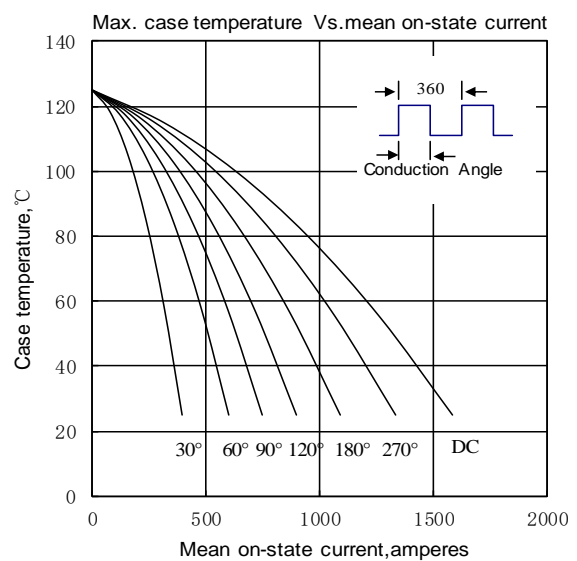


Fig6

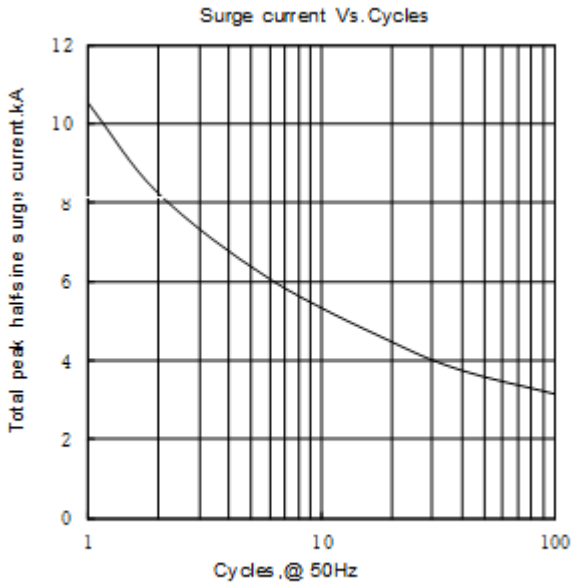


Fig.7

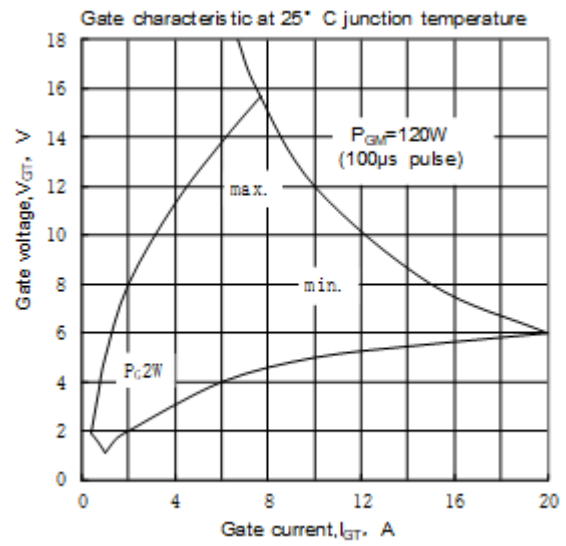


Fig.8

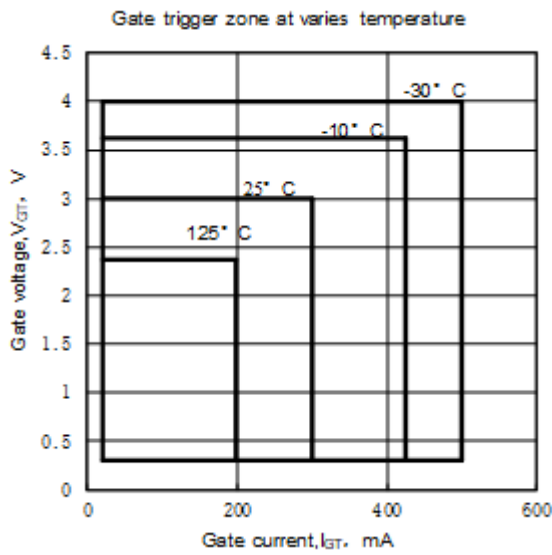
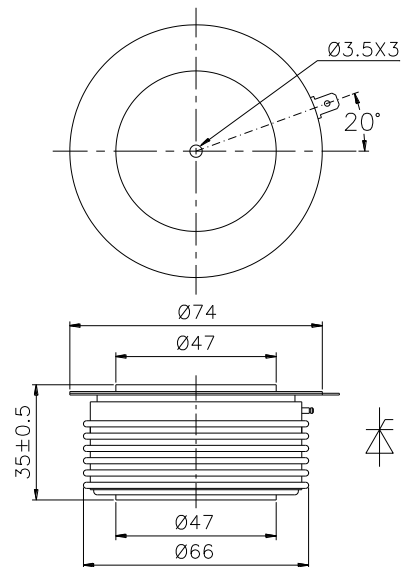


Fig.9



Nlps reserves the right to change specifications without notice.