

**Features**

- Low forward voltage drop
- High reverse voltage
- Hermetic metal cases with ceramic insulators

**Typical Applications**

- All purpose high power rectifier diodes
- High power resistance welding equipment
- Non-controllable and half-controllable rectifiers
- Controlled rectifiers

$I_{F(AV)}$       **4000 A**  
 $V_{RRM}$         **2100~3000 V**  
 $I_{FSM}$          **45 kA**  
 $I^2t$             **10125 10<sup>3</sup>A<sup>2</sup>S**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T <sub>j</sub> (°C)	VALUE			UNIT
					Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,	T <sub>C</sub> =85°C	160			4000	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms		160	2100		3000	V
$I_{RRM}$	Repetitive peak current	at V <sub>RRM</sub>		160			200	mA
$I_{FSM}$	Surge forward current	10ms half sine wave, V <sub>R</sub> =0.6V <sub>RRM</sub>		160			45	kA
$I^2t$	I <sup>2</sup> t for fusing coordination						10125	A <sup>2</sup> s*10 <sup>3</sup>
$V_{FO}$	Threshold voltage			160			0.90	V
r <sub>F</sub>	Forward slope resistance						0.099	mΩ
$V_{FM}$	Peak forward voltage	I <sub>FM</sub> =5000A, F=40kN		25			1.50	V
Q <sub>rr</sub>	Recovery charge	I <sub>FM</sub> =2000A, tp=2000μs, di/dt=-20A/μs, V <sub>R</sub> =50V		160		5000		μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	DC: double side cooled Clamping force 40kN					0.010	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink						0.003	
F <sub>m</sub>	Mounting force				35		47	kN
T <sub>stg</sub>	Stored temperature				-40		160	°C
W <sub>t</sub>	Weight					1100		g
Outline	P46							

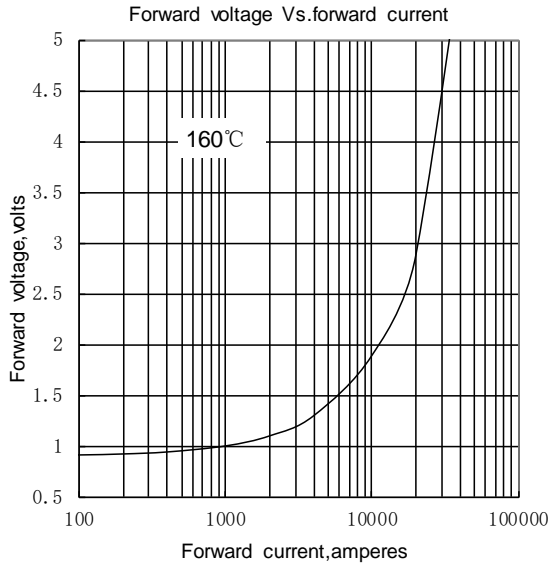


Fig.1

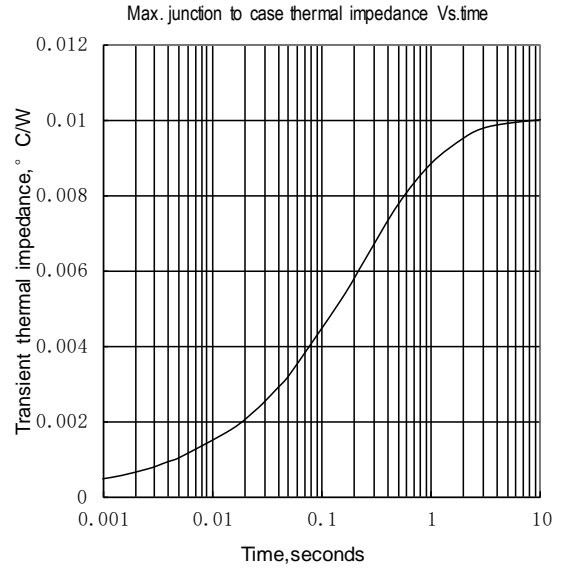


Fig.2

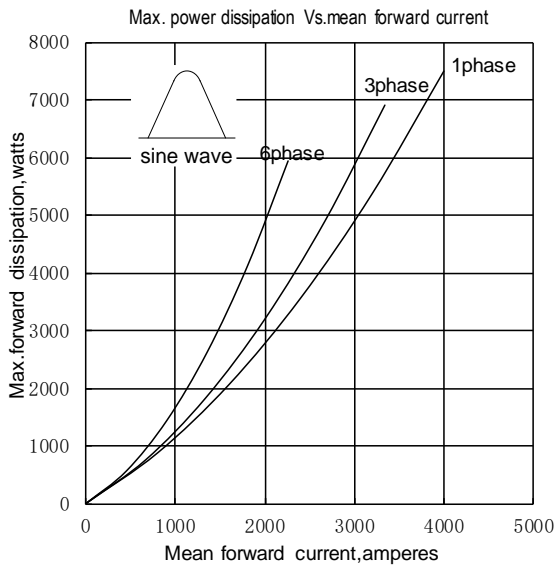


Fig.3

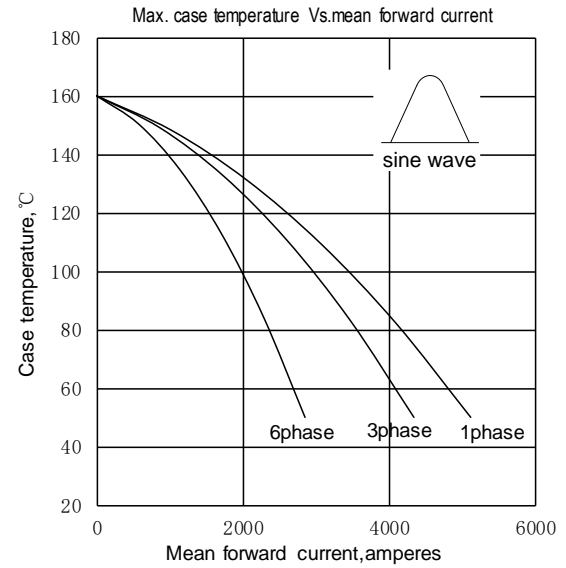


Fig.4

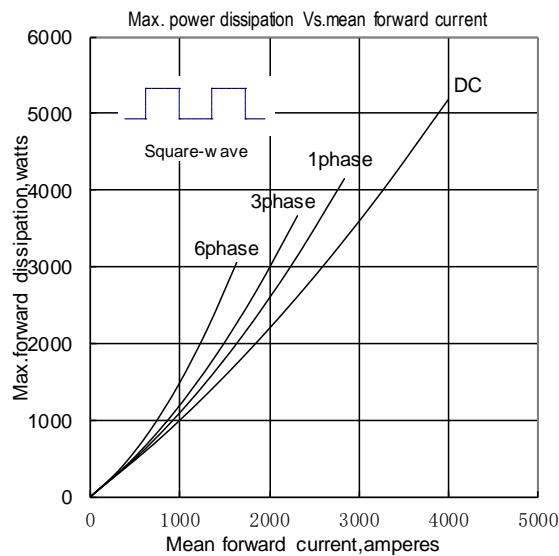


Fig.5

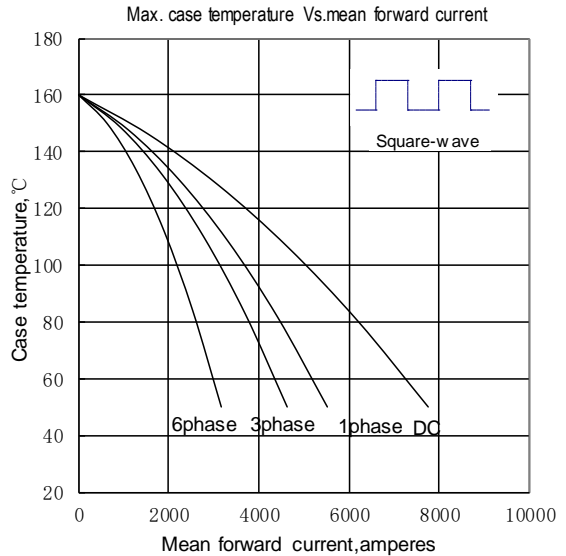


Fig.6

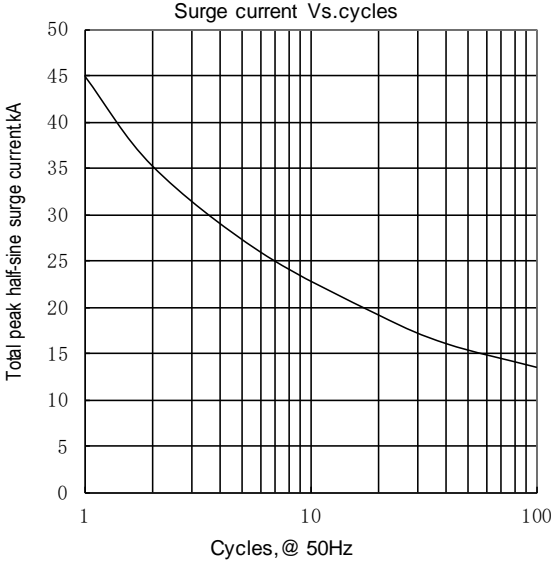
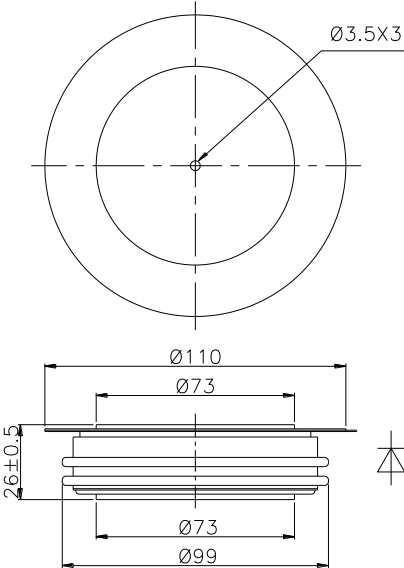


Fig.7



Nlps reserves the right to change specifications without notice.