

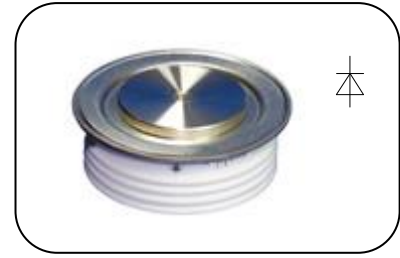
**Features**

- 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

**$I_{F(AV)}$  1080A**  
 **$V_{RRM}$  1100~2000 V**  
 **$I_{FSM}$  9 kA**  
 **$I^2t$  405 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	175			1080	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms	175	1100		2000	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	175			30	mA
$I_{FSM}$	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$	175			9	kA
$I^2t$	$I^2t$ for fusing coordination					405	A <sup>2</sup> s*10 <sup>3</sup>
$V_{FO}$	Threshold voltage		175			0.98	V
$r_F$	Forward slope resistance					0.33	mΩ
$V_{FM}$	Peak forward voltage	$I_{FM}=3770A, F=7.0kN$	175			2.22	V
$Q_{rr}$	Recovery charge	$I_{FM}=2000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$	175		1600		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	DC: double side cooled Clamping force 7.0kN				0.045	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.010	
$F_m$	Mounting force			5.3		10	kN
$T_{stg}$	Stored temperature			-40		175	°C
$W_t$	Weight				80		g
Outline	P33						

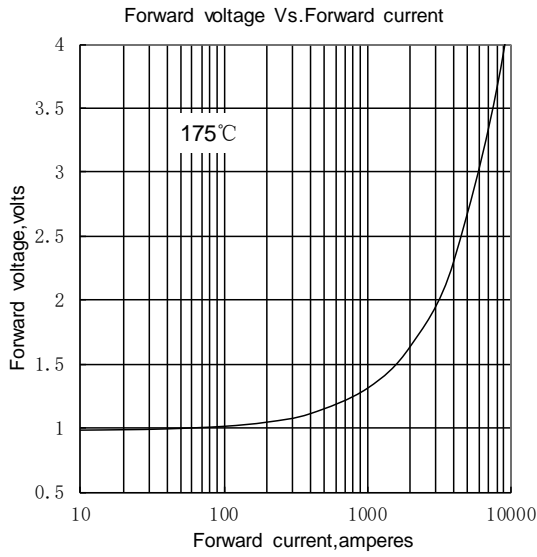


Fig.1

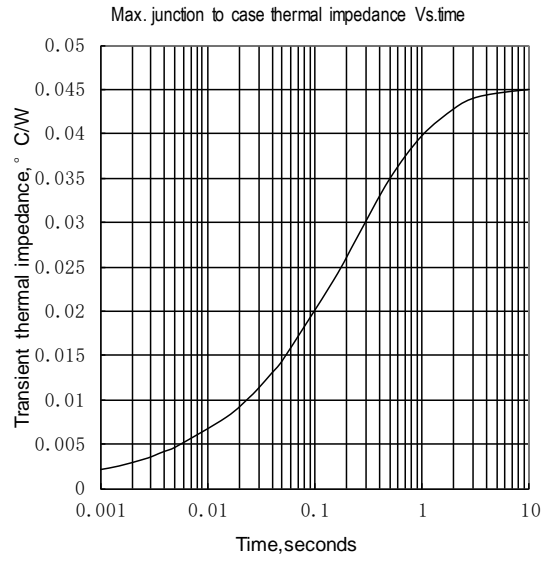


Fig.2

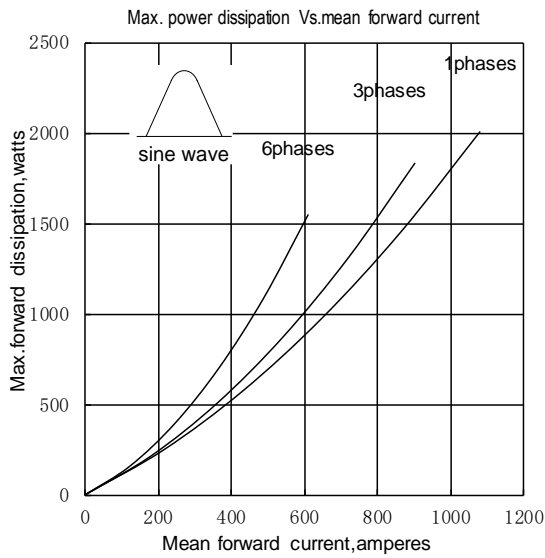


Fig.3

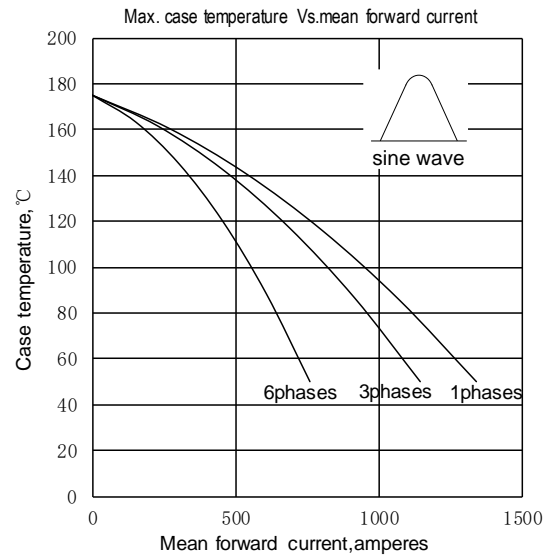


Fig.4

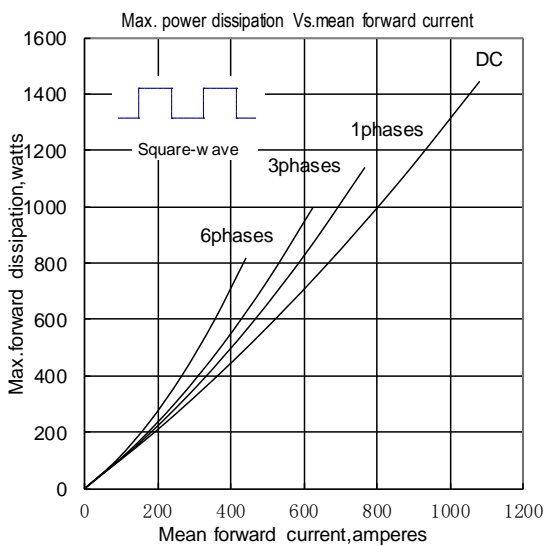


Fig.5

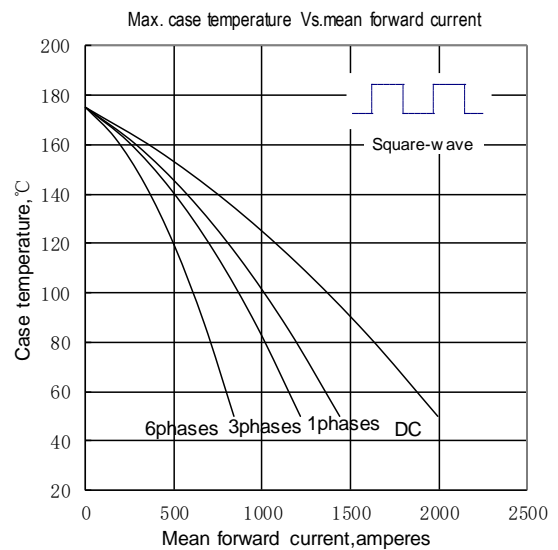


Fig.6

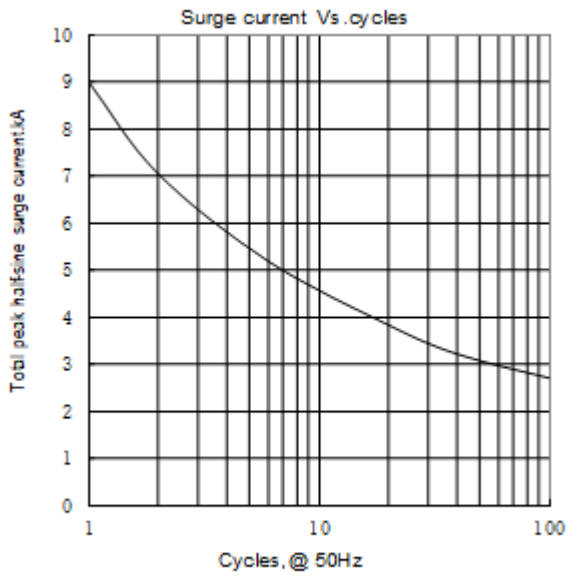
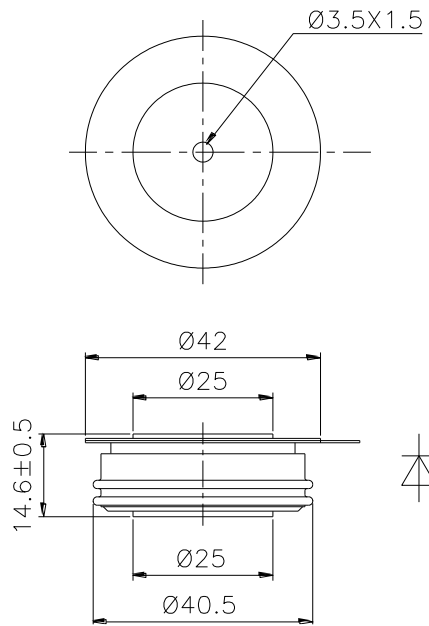


Fig.7



Nlps reserves the right to change specifications without notice.