

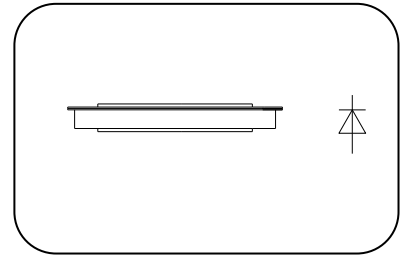
**Features**

- Optimized for high current rectifiers
- Very low threshold voltage and slop resistance
- Very low thermal resistance

**Typical Applications**

- High current application For Welders up to 1000Hz
- Electrode plating

**$I_{F(AV)}$  12000 A**  
 **$V_{RRM}$  200~400 V**  
 **$I_{FSM}$  90 kA**  
 **$I^2t$  40000 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			12000	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms	175	200		400	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	175			50	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	175			90	kA
$I^2t$	I <sup>2</sup> t for fusing coordination	$V_R=0V_{RRM}$				40000	A <sup>2</sup> s*10 <sup>3</sup>
$V_{FO}$	Threshold voltage	$I_{FM}=8000-18000A$	175			0.74	V
$r_F$	Forward slope resistance					0.019	mΩ
$V_{FM}$	Max Peak on-state voltage	$I_{FM}=6000A, F=50kN$	25			0.98	V
$Q_{rr}$	Recovery charge	$I_{FM}=1000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$	175			550	μC
$R_{th(j-c)}$	Thermal resistance Junction to case	DC double side cooled Clamping force 50.0kN				0.006	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.003	
$F_m$	Mounting force			35	50	65	kN
$T_{stg}$	Stored temperature			-40		175	°C
$W_t$	Weight				220		g
Outline	P59						

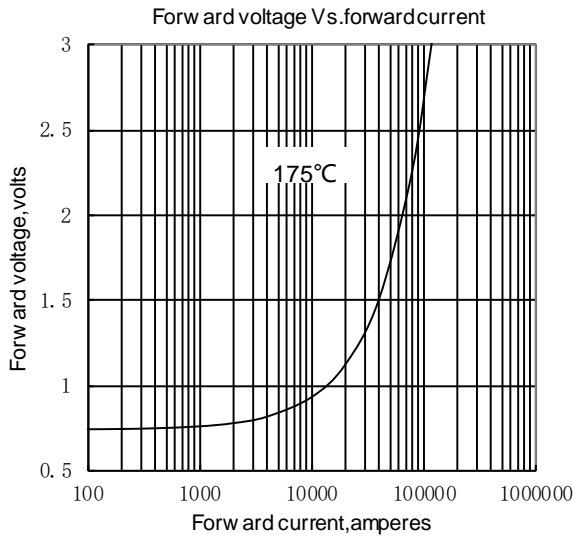


Fig.1

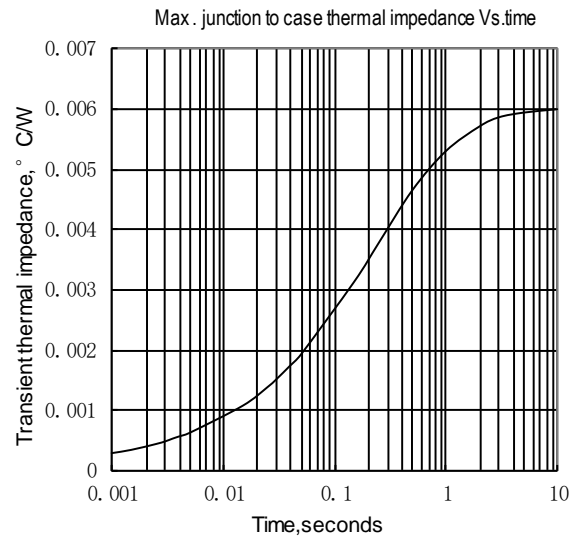


Fig.2

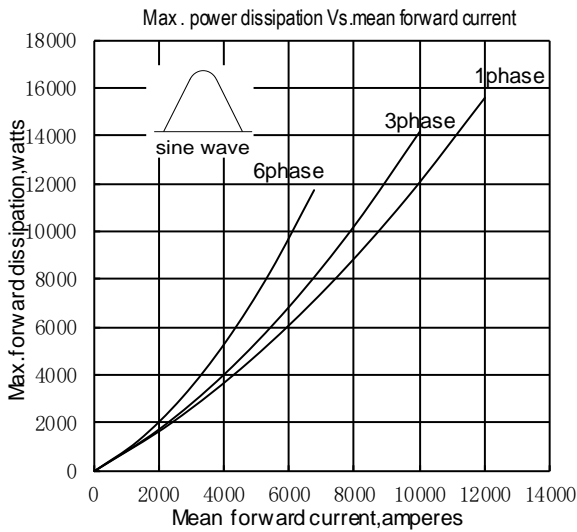


Fig.3

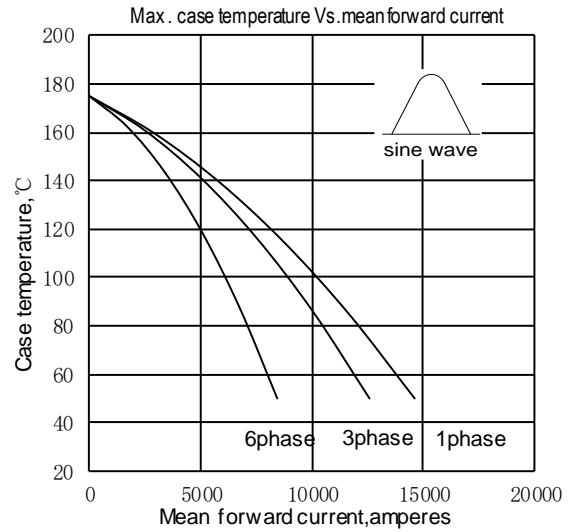


Fig.4

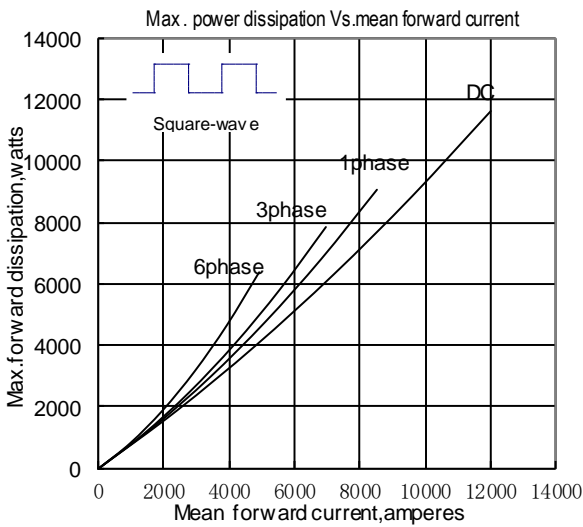


Fig.5

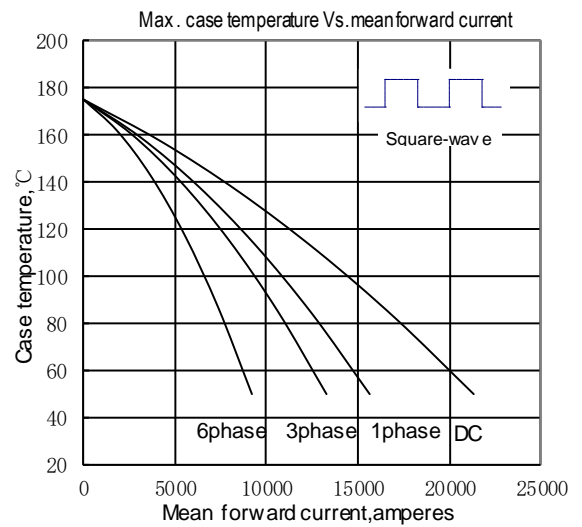


Fig.6

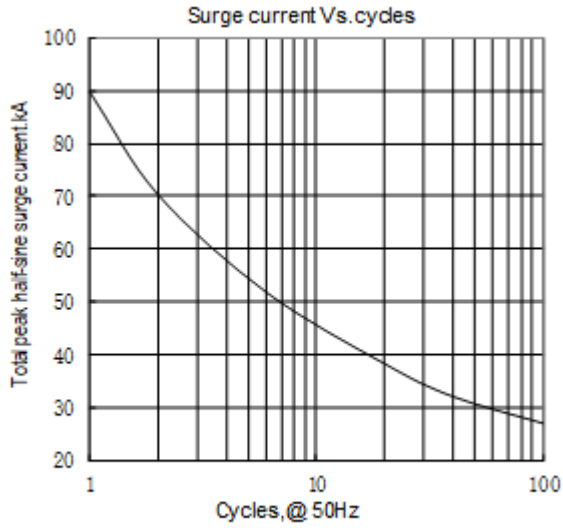


Fig.7

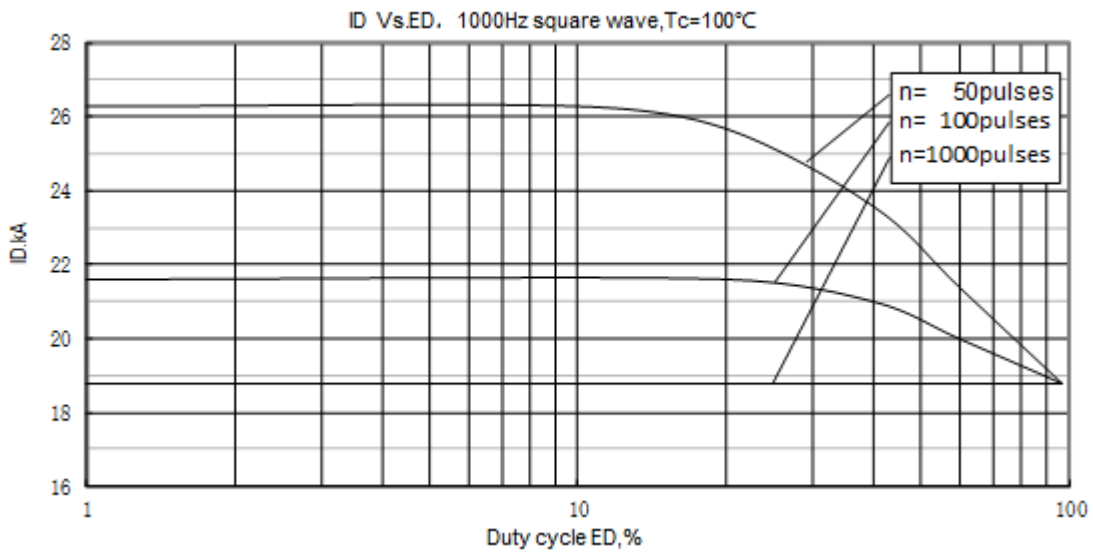
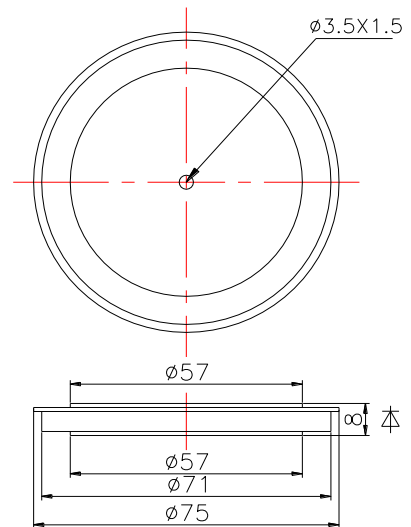


Fig.8



Nlps reserves the right to change specifications without notice.