

### 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

$I_{F(AV)}$       **2000 A**  
 $V_{RRM}$         **5600~6500 V**  
 $I_{FSM}$          **35 kA**  
 $I^2t$             **6125 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> =100°C	150			2000	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms	150	5600		6500	V
$I_{RRM}$	Repetitive peak current	at V <sub>RRM</sub>	150			300	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	150			35	kA
$I^2t$	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				6125	A <sup>2</sup> s*10 <sup>3</sup>
$V_{FO}$	Threshold voltage		150			0.94	V
$r_F$	Forward slope resistance					0.27	mΩ
$V_{FM}$	Peak forward voltage	I <sub>FM</sub> =3000A, F=47kN	150			1.80	V
$Q_{rr}$	Recovery charge	I <sub>FM</sub> =2000A, tp=2000μs, di/dt=-5A/μs, V <sub>R</sub> =50V	150		6500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	DC: double side cooled Clamping force 47kN				0.011	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.003	
$F_m$	Mounting force			35		47	kN
$T_{stg}$	Stored temperature			-40		160	°C
$W_t$	Weight				1460		g
Outline	P54						

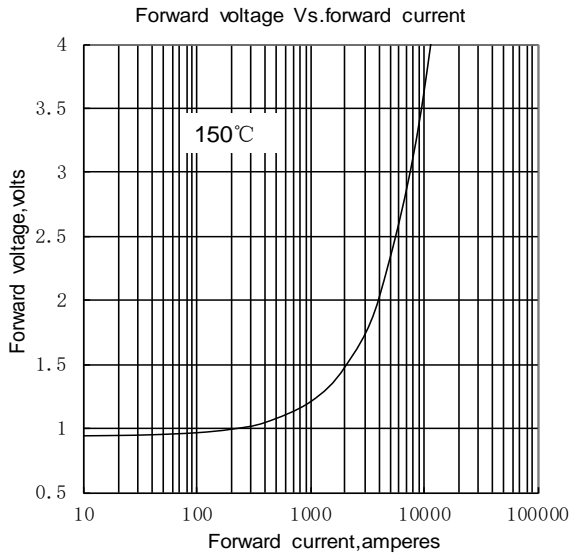


Fig. 1

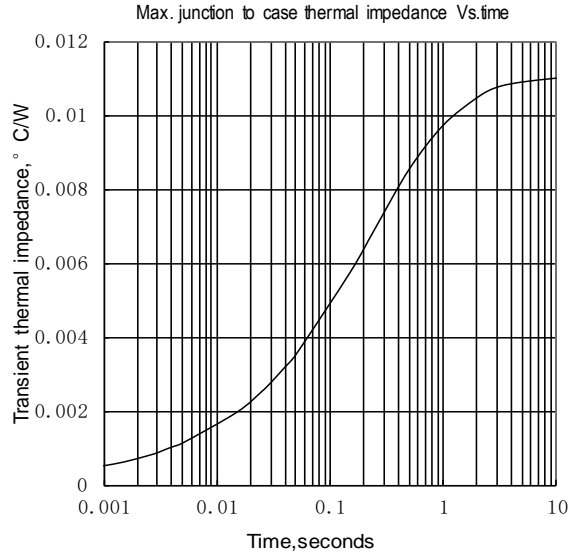


Fig. 2

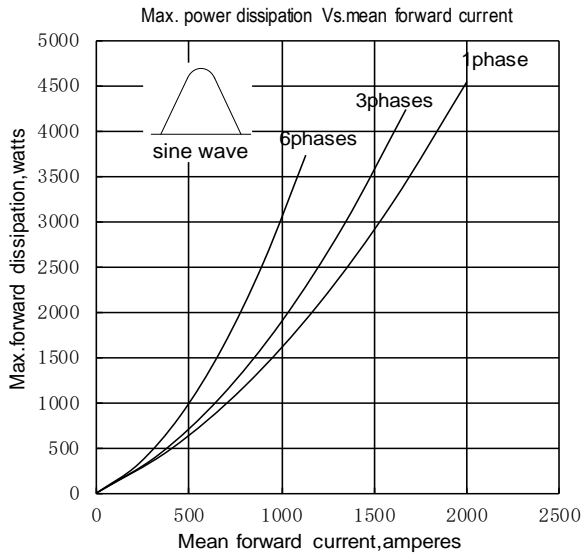


Fig. 3

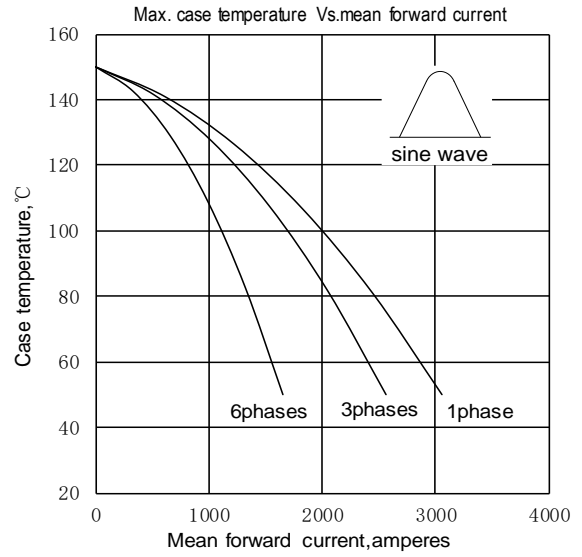


Fig. 4

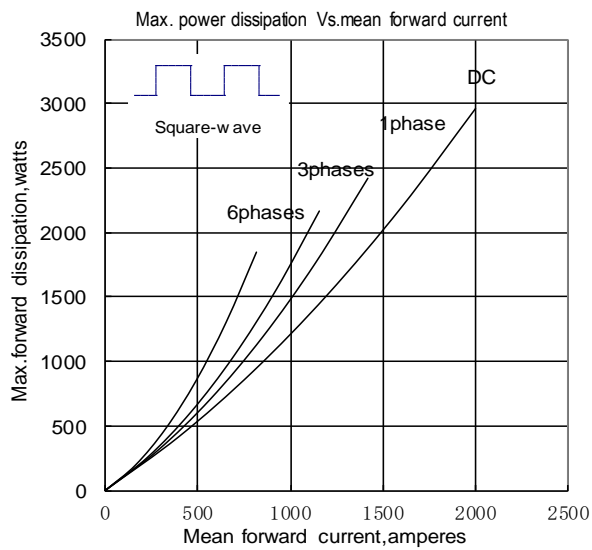


Fig. 5

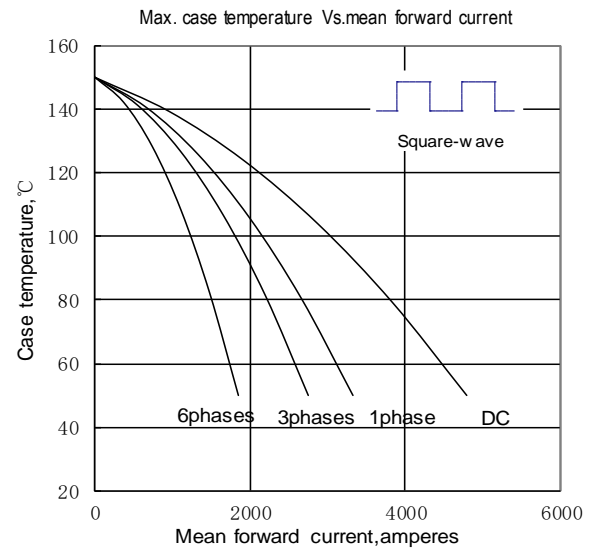


Fig. 6

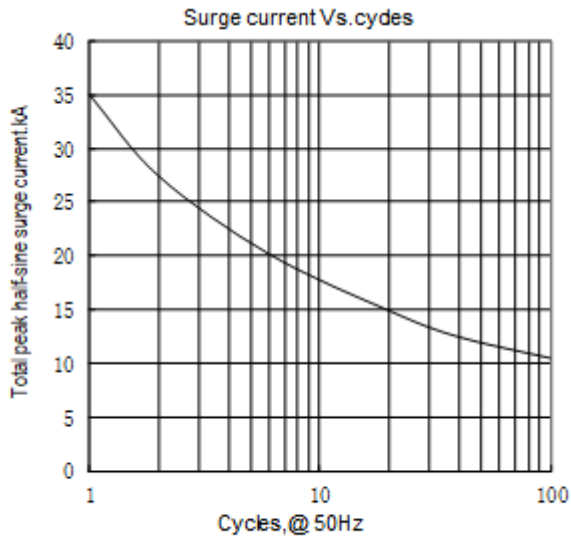
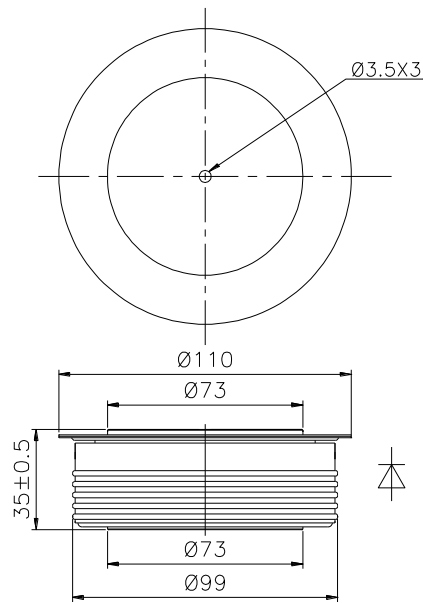


Fig7



Nlps reserves the right to change specifications without notice.