

**Features**

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

**$I_{F(AV)}$  5650A**  
 **$V_{RRM}$  4300V ~ 5000V**

**Typical Applications**

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

**$I_{FSM}$  60 kA**  
 **$I^2t$  18000 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,	$T_C=85^\circ\text{C}$	150			5650	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms		150	4300		5000	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$		150			300	mA
$I_{FSM}$	Surge forward current	10ms half sine wave		150			60	kA
$I^2t$	$I^2t$ for fusing coordination	$V_R=0.6V_{RRM}$					18000	A <sup>2</sup> s*10 <sup>3</sup>
$V_{FO}$	Threshold voltage			150			0.91	V
$r_F$	Forward slope resistance						0.10	mΩ
$V_{FM}$	Peak forward voltage	$I_{FM}=5000A, F=108kN$		25			2.00	V
$Q_{rr}$	Recovery charge	$I_{FM}=2000A, tp=4000\mu s, di/dt=-20A/\mu s, V_R=100V$		150		9000		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. double side cooled Clamping force 108kN					0.0050	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.0015	
$F_m$	Mounting force				81		108	kN
$T_{vj}$	Junction temperature				-40		150	°C
$T_{stg}$	Stored temperature				-40		160	°C
$W_t$	Weight					2000		g
Outline	P48							

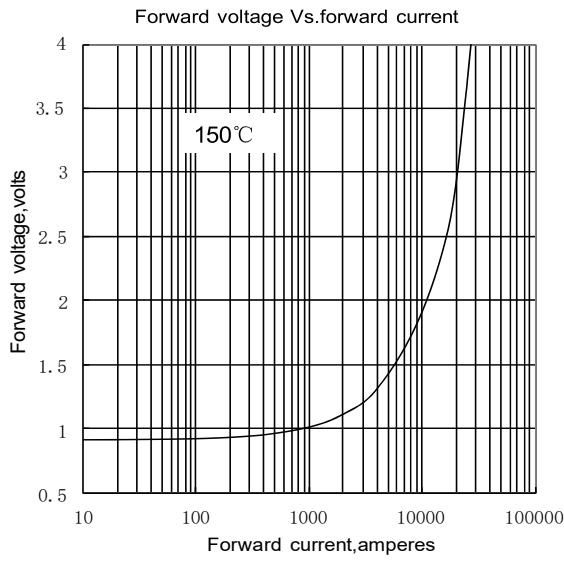


Fig.1

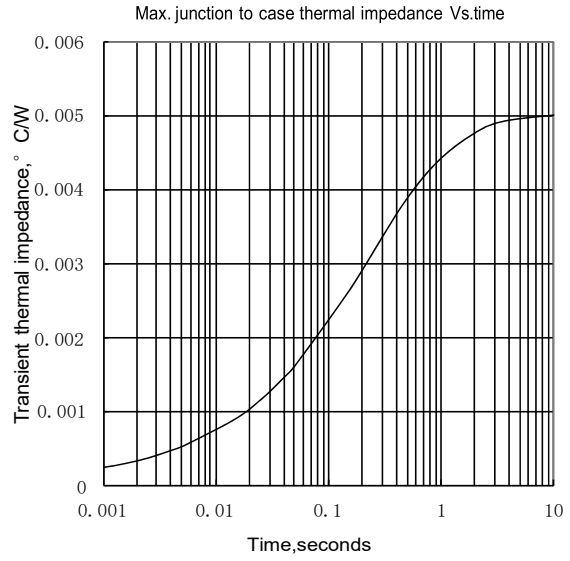


Fig.2

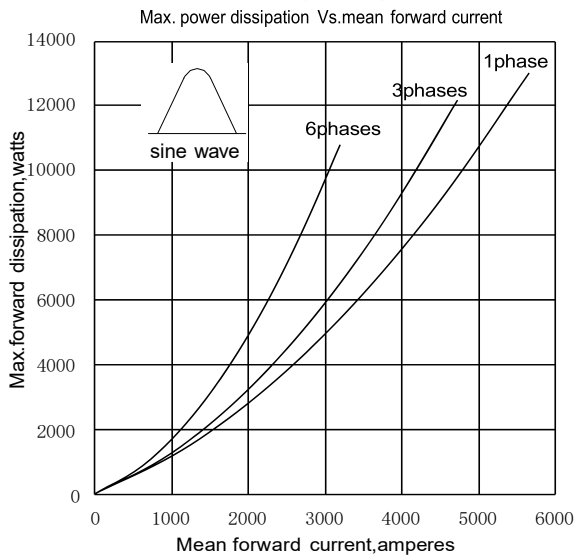


Fig.3

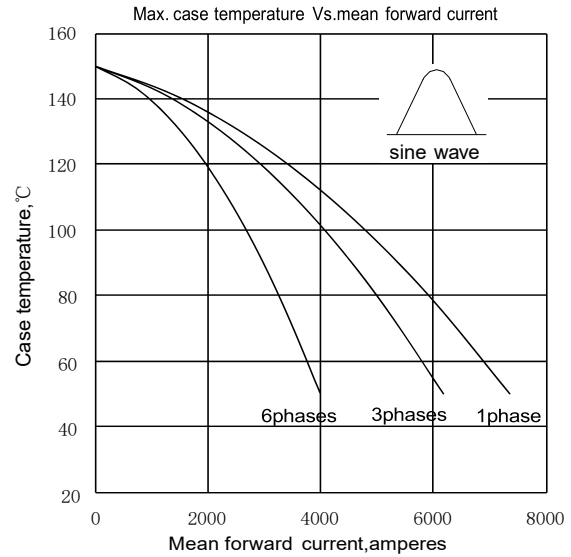


Fig.4

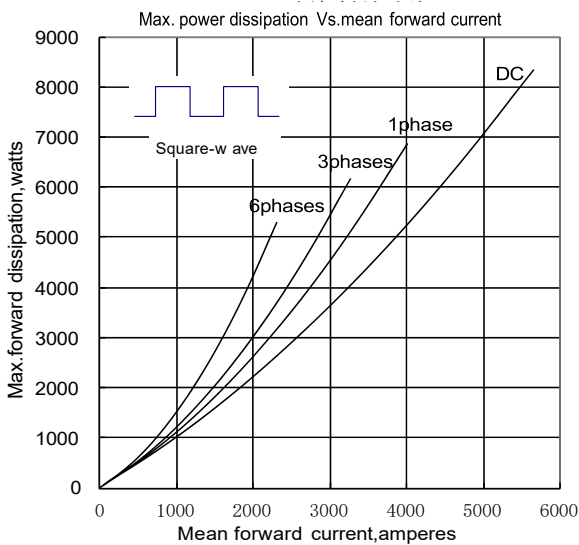


Fig.5

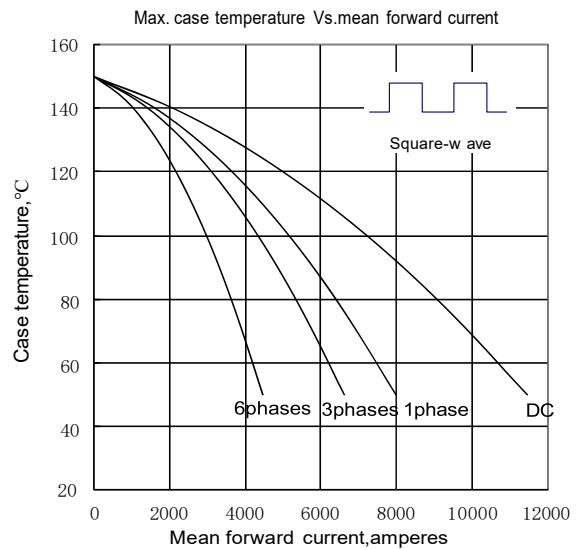


Fig.6

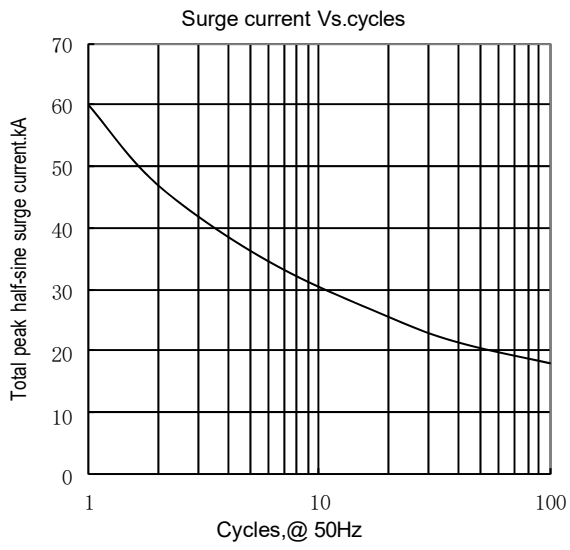
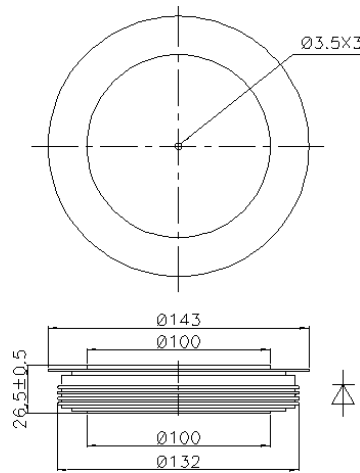


Fig7

Outline:



Nlps reserves the right to change specifications without notice.