

Features

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

 $I_{F(AV)}$ 4500A V_{RRM} 4300 ~ 5000V

Typical Applications

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

 I_{FSM} 46 kA I^2t 10580 10³A²s

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T _j (°C)	VALUE			UNIT
					Min	Type	Max	
I _{F(AV)}	Mean forward current	180° half sine wave 50Hz Double side cooled,	T _C =85°C	150			4500	A
			T _C =100°C				3800	
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 V _R =0.6V _{RRM}		150			46	kA
I ² t	I ² t for fusing coordination					10580	10 ³ A ² s	
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=70kN		25			1.65	V
Q _{rr}	Recovery charge	I _{FM} =2000A, tp=4000μs, di/dt=-20A/μs, V _R =100V		150		9000		μC
R _{th(j-c)}	Thermal resistance Junction to case	D.C. Double side cooled Clamping force 70kN					0.007	°C/W
R _{th(c-h)}	Thermal resistance case to heat sink						0.002	
F _m	Mounting force				63		84	kN
T _{vj}	Junction temperature				-40		150	°C
T _{stg}	Stored temperature				-40		160	°C
W _t	Weight					1390		g
Outline	P47							

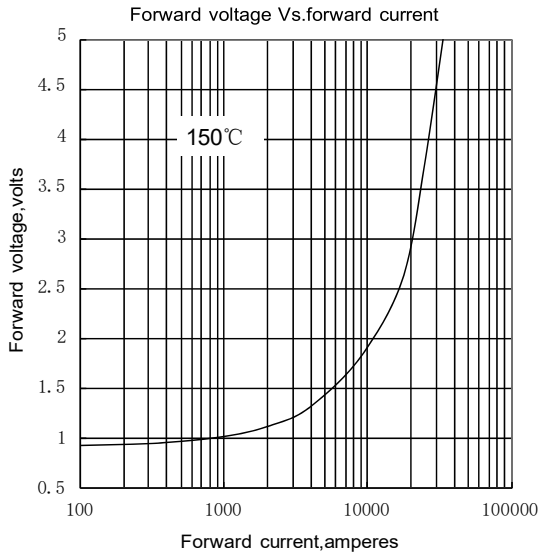


Fig.1

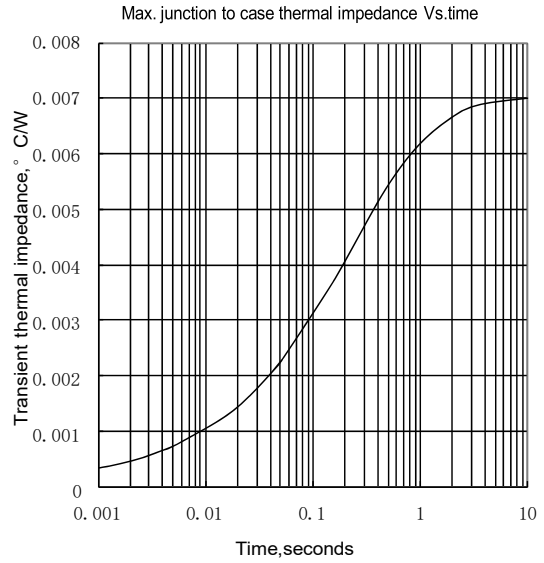


Fig.2

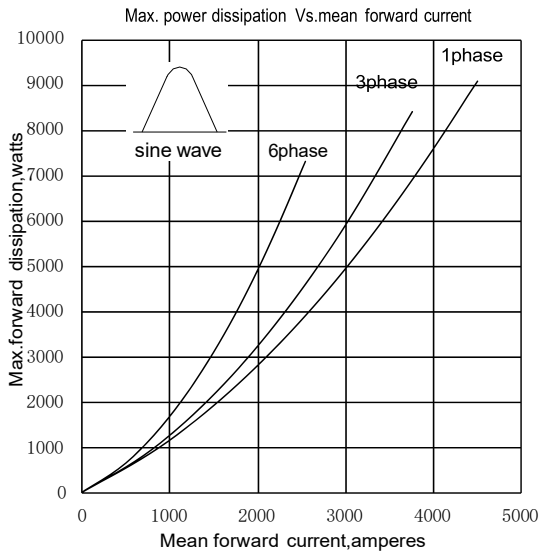


Fig.3

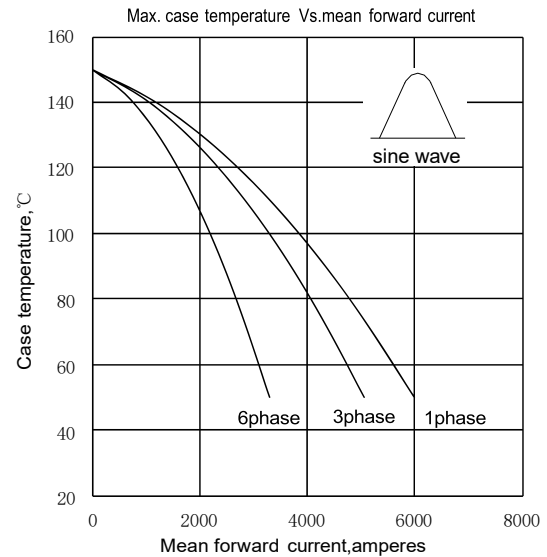


Fig.4

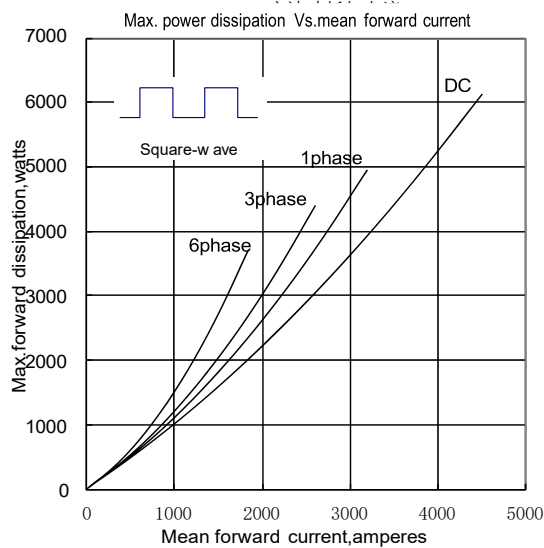


Fig.5

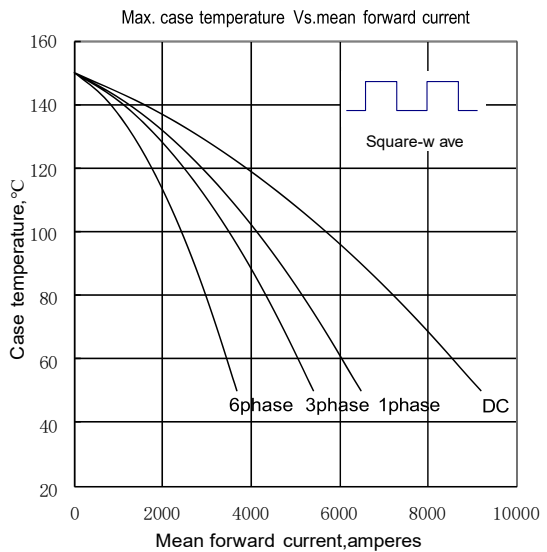


Fig.6

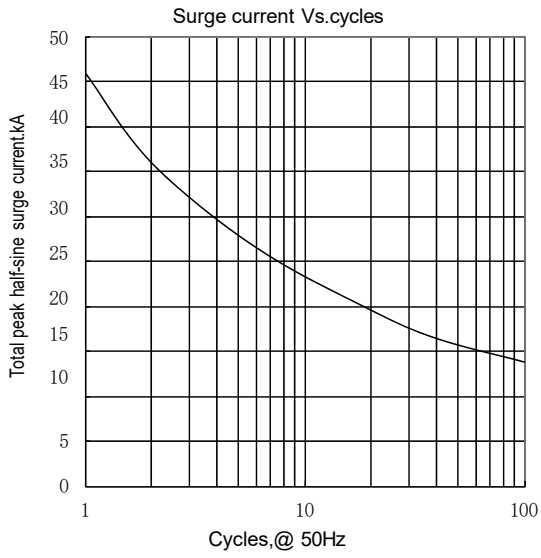
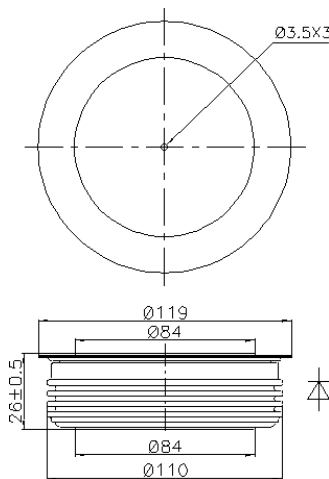


Fig.7

Outline:



Nlps reserves the right to change specifications without notice.