

**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<sub>F(AV)</sub>**      **4520 A**  
**V<sub>RRM</sub>**      **1100~2000 V**  
**I<sub>FSM</sub>**      **44 kA**  
**I<sup>2</sup>t**      **9680 10<sup>3</sup>A<sup>2</sup>S**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Double side cooled,	T <sub>C</sub> =85°C	175		4520	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms	175	1100		2000	V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	175			160	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave	175			44	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				9680	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		175			0.85	V
r <sub>F</sub>	Forward slope resistance					0.073	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =5000A, F=35kN	175			1.22	V
Q <sub>rr</sub>	Recovery charge	I <sub>FM</sub> =2000A, tp=2000μs, di/dt=-20A/μs, V <sub>R</sub> =50V	175		5000		μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	DC double side cooled Clamping force 35kN				0.012	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink					0.003	
F <sub>m</sub>	Mounting force			30		40	kN
T <sub>stg</sub>	Stored temperature			-40		175	°C
W <sub>t</sub>	Weight				880		g
Outline		P44					

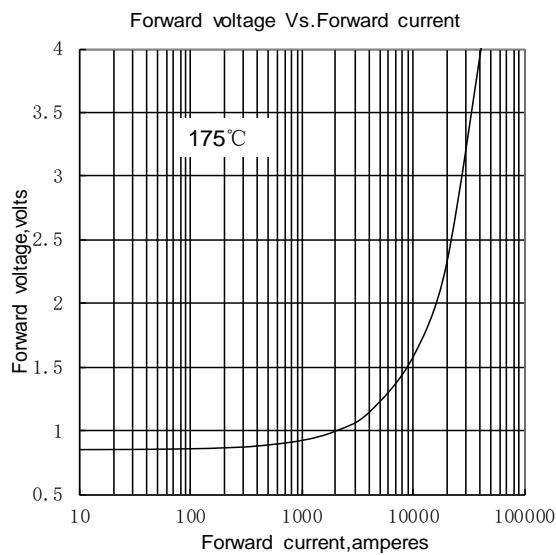


Fig.1

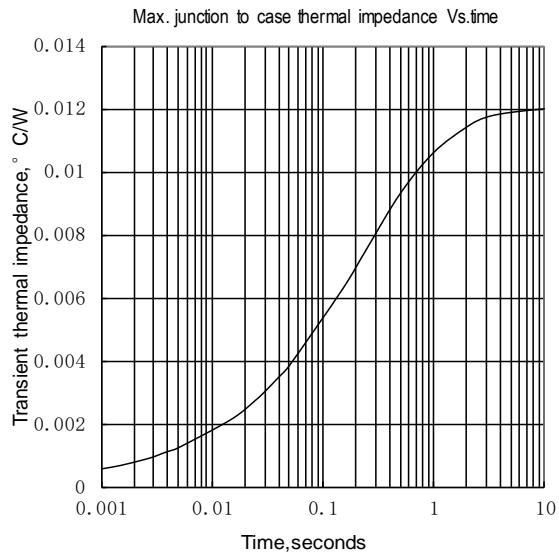


Fig.2

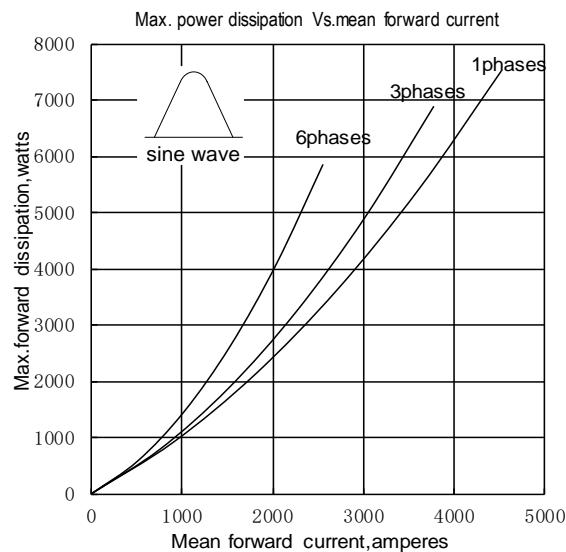


Fig.3

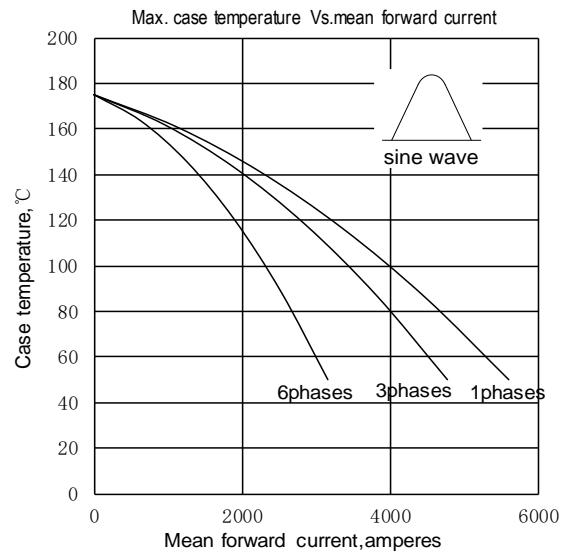


Fig.4

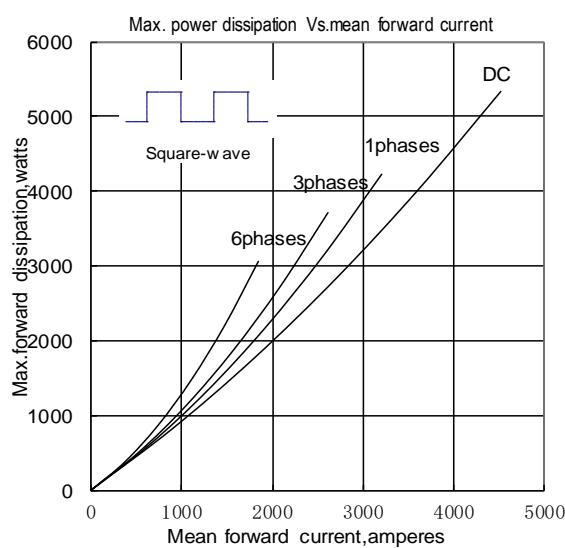


Fig.5

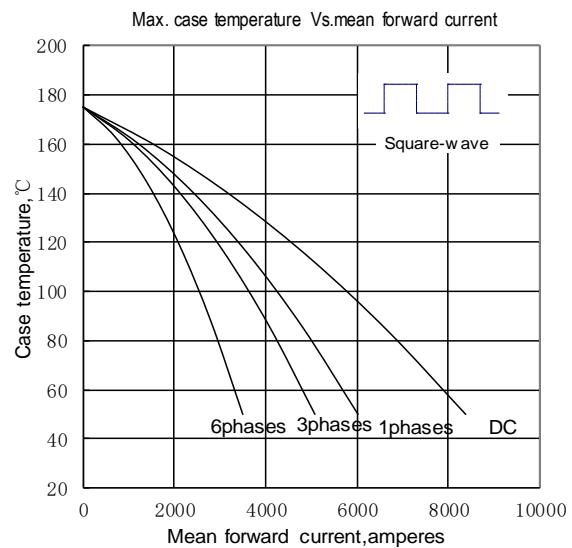


Fig.6

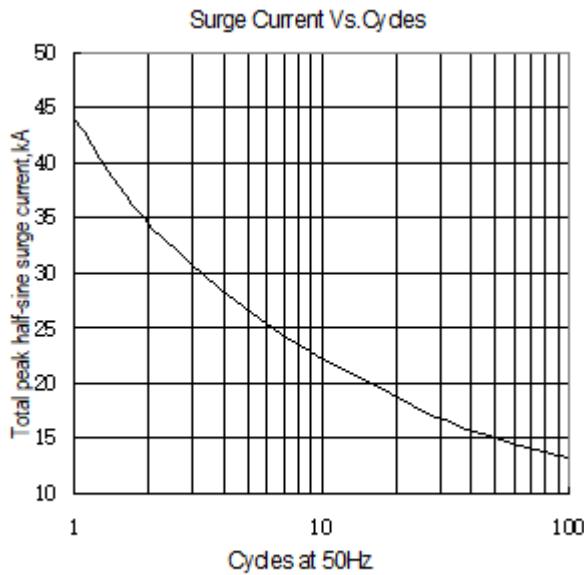


Fig.7

