

### Features

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

**I<sub>F(AV)</sub> 2490A**

**V<sub>RRM</sub> 1100 ~ 2000V**

**I<sub>FSM</sub> 27 kA**

**I<sup>2</sup>t 3645 10<sup>3</sup>A<sup>2</sup>S**

### Typical Applications

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

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			2490	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			80	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave		175			27	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>					3645	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage			175			0.89	V
r <sub>F</sub>	Forward slope resistance						0.15	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =3000A, F=24kN		25			2.0	V
Q <sub>rr</sub>	Recovery charge	I <sub>FM</sub> =2000A, tp=4000μs, di/dt=-20A/μs, V <sub>R</sub> =100V		175		3500		μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	D.C. double side cooled Clamping force 24kN					0.020	°C/W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink						0.005	
F <sub>m</sub>	Mounting force				19		26	kN
T <sub>vj</sub>	Junction temperature				-40		175	°C
T <sub>stg</sub>	Stored temperature				-40		175	°C
W <sub>t</sub>	Weight					440		g
Outline	P42							

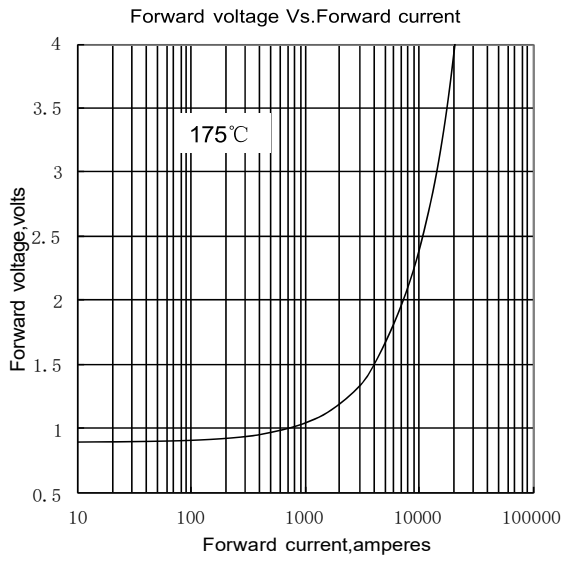


Fig.1

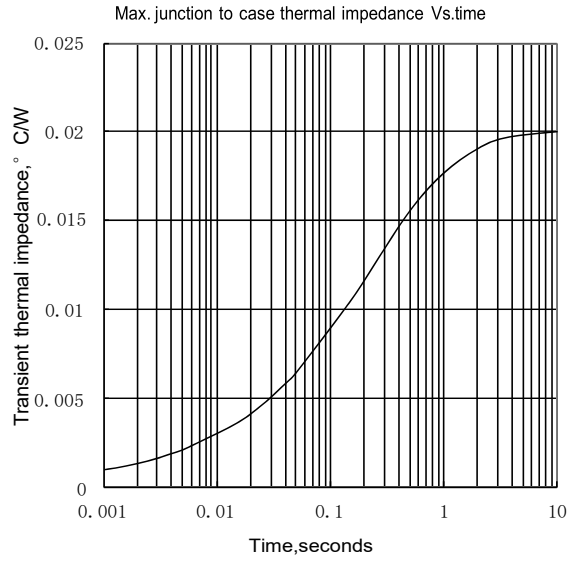


Fig.2

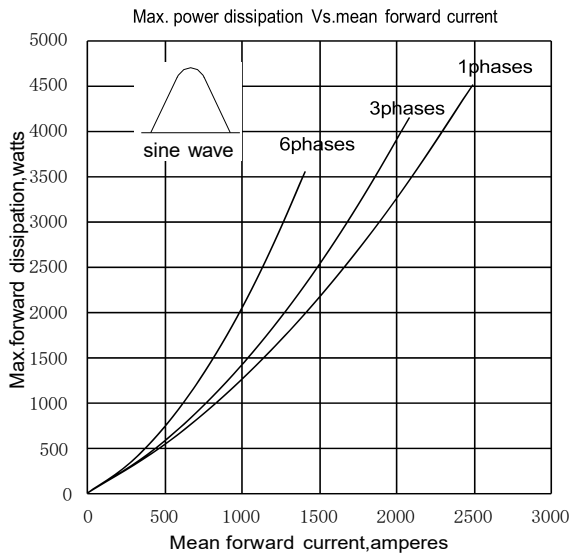


Fig.3

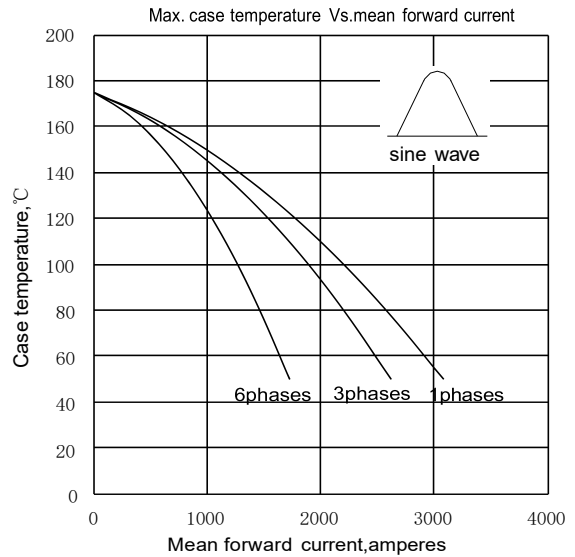


Fig.4

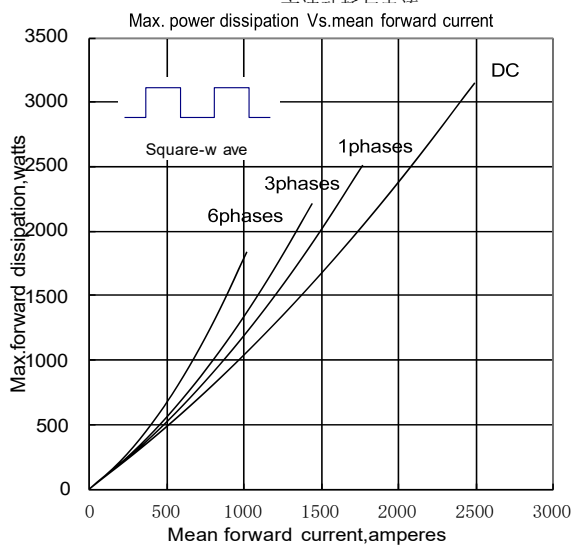


Fig.5

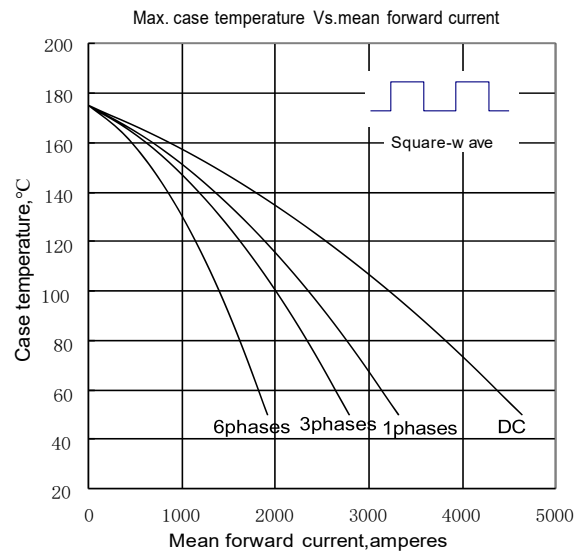


Fig.6

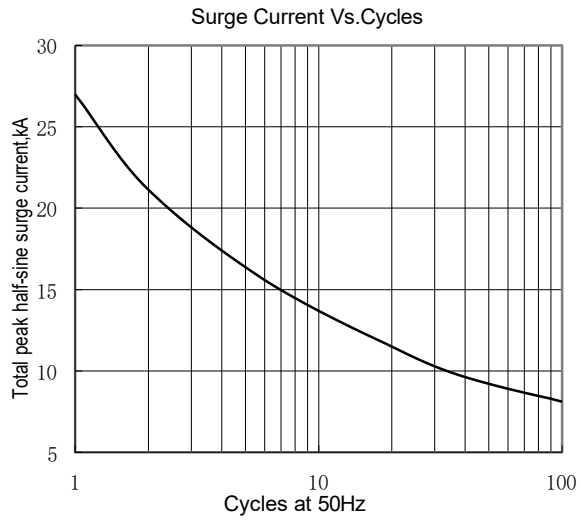


Fig.7

Outline:

