

## Features

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

 $I_{F(AV)}$  5250A $V_{RRM}$  5100 ~ 6500V

## Typical Applications

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

 $I_{FSM}$  84 kA $I^2t$  35280  $10^3 A^2s$ 

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			5250	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms		150	5100		6500	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$		150			400	mA
$I_{FSM}$	Surge forward current	10ms half sine wave		150			84	kA
$I^2t$	$I^2t$ for fusing coordination	$V_R=0.6V_{RRM}$					35280	$A^2s \cdot 10^4$
$V_{FO}$	Threshold voltage			150			0.81	V
$r_F$	Forward slope resistance						0.12	mΩ
$V_{FM}$	Peak forward voltage	$I_{FM}=5000A, F=140kN$		25			1.65	V
$Q_{rr}$	Recovery charge	$I_{FM}=2000A, tp=4000\mu s, di/dt=-20A/\mu s,$ $V_R=100V$		150		20000		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Double side cooled Clamping force 140kN					0.004	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.001	
$F_m$	Mounting force				110		140	kN
$T_{vj}$	Junction temperature				-40		150	°C
$T_{stg}$	Stored temperature				-40		160	°C
$W_t$	Weight					3420		g
Outline	P51							

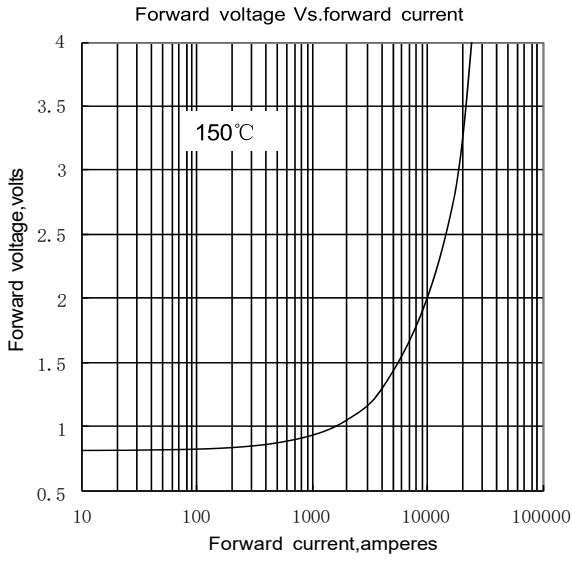


Fig.1

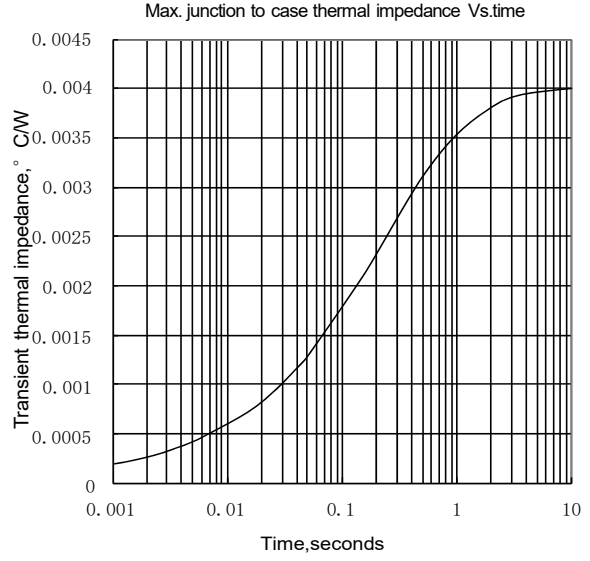


Fig.2

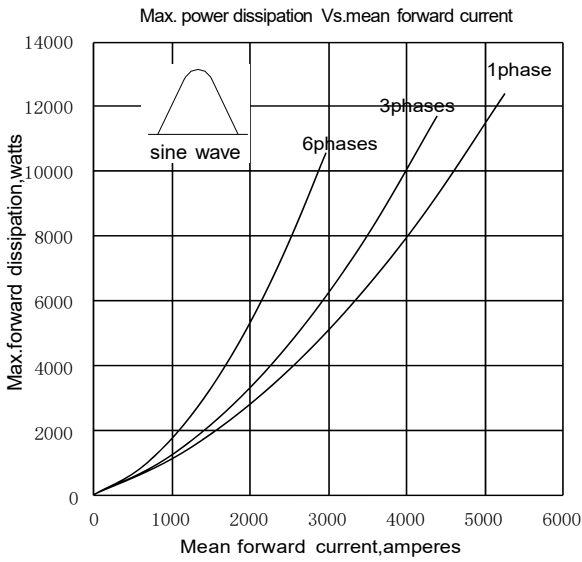


Fig.3

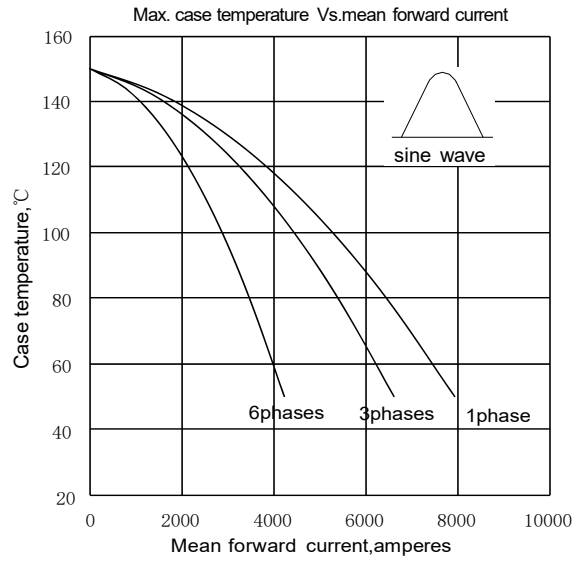


Fig.4

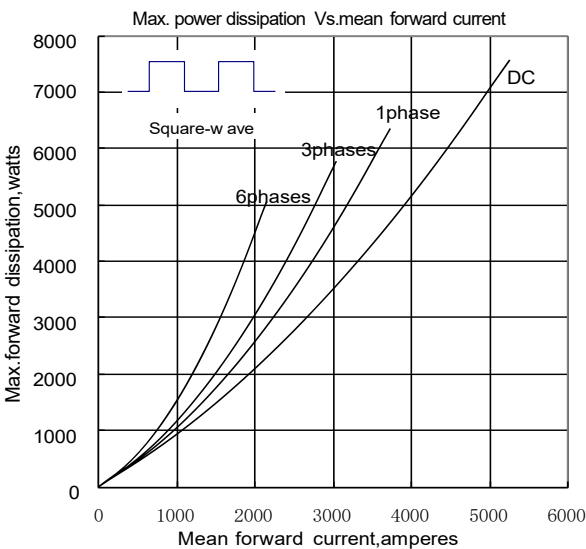


Fig.5

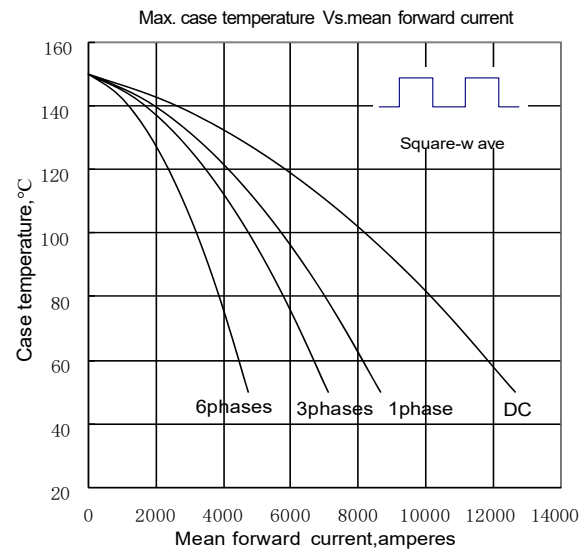


Fig.6

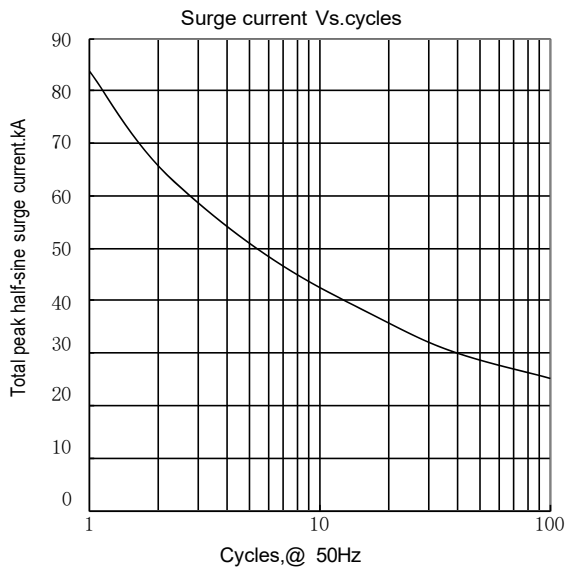


Fig.7

Outline:

