

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

 $I_{F(AV)}$ 1080A V_{RRM} 1100 ~ 2000V I_{FSM} 10 kA I^2t 500 $10^3 A^2S$

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		$T_j(^{\circ}C)$	VALUE			UNIT
					Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,	$T_c=85^{\circ}C$	175			1080	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms		175	1100		2000	V
I_{RRM}	Repetitive peak current	at V_{RRM}		175			30	mA
I_{FSM}	Surge forward current	10ms half sine wave		175			10	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$					500	$A^2s \cdot 10^3$
V_{FO}	Threshold voltage			175			0.98	V
r_F	Forward slope resistance						0.33	m Ω
V_{FM}	Peak forward voltage	$I_{FM}=1200A, F=7.0kN$		25			1.80	V
Q_{rr}	Recovery charge	$I_{FM}=1000A, tp=4000\mu s, di/dt=-20A/\mu s, V_R=100V$		175		1600		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. double side cooled Clamping force 7.0kN					0.045	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.010	
F_m	Mounting force				5.3		10	kN
T_{vj}	Junction temperature				-40		175	$^{\circ}C$
T_{stg}	Stored temperature				-40		175	$^{\circ}C$
W_t	Weight					80		g
Outline	P33							

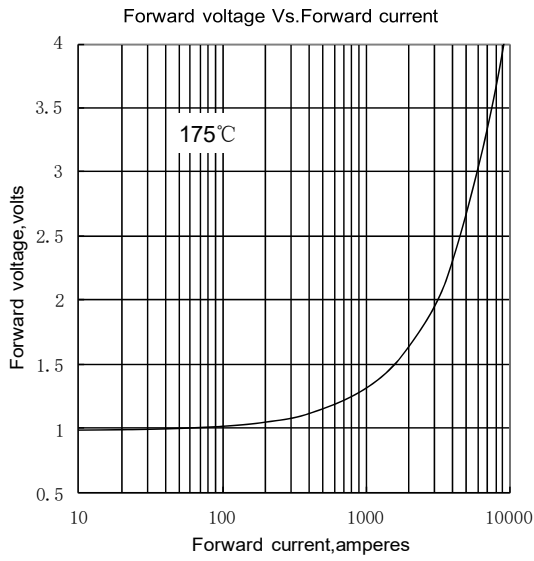


Fig.1

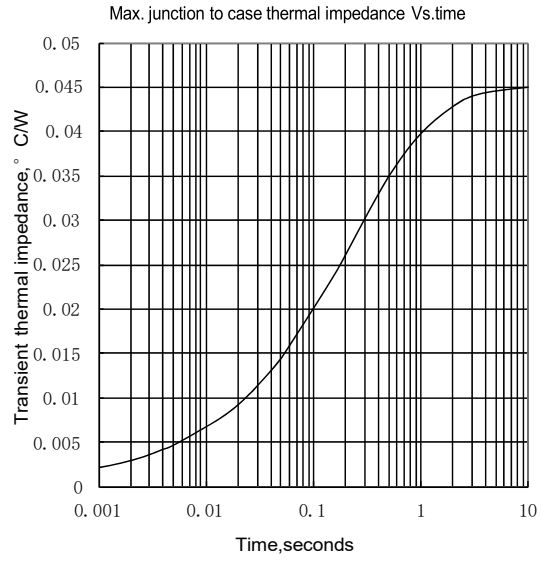


Fig.2

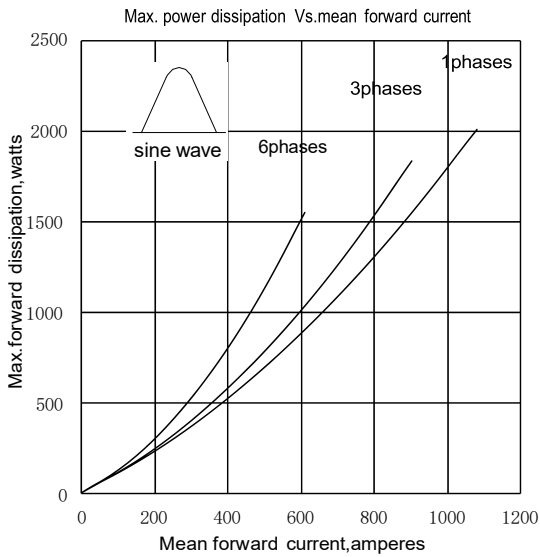


Fig.3

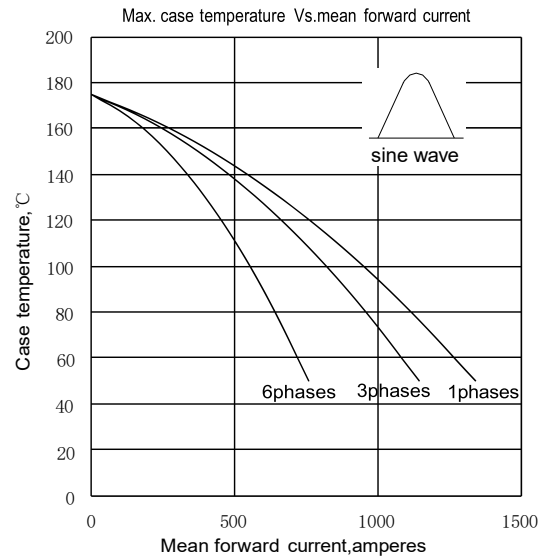


Fig.4

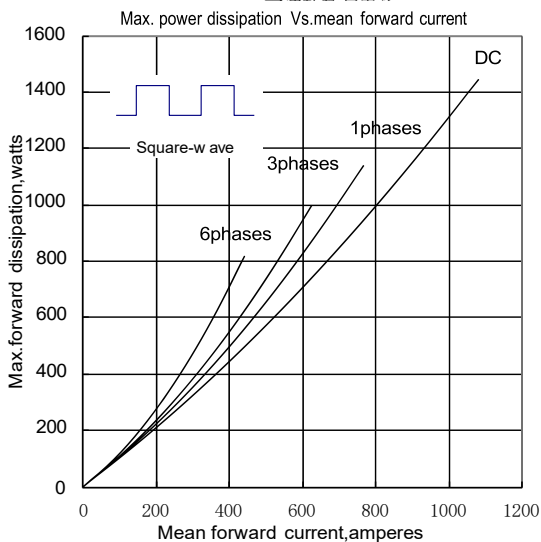


Fig.5

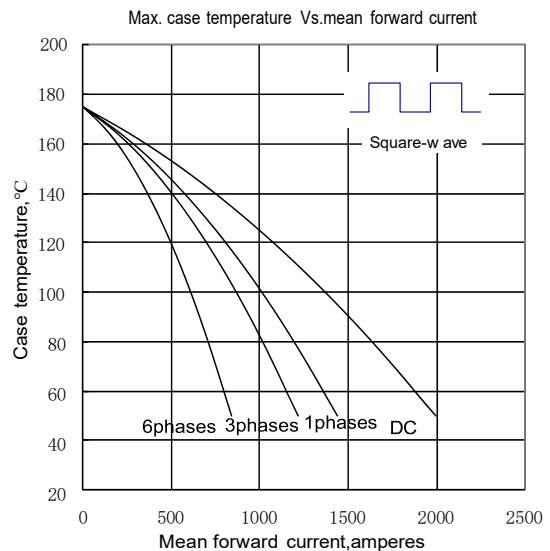


Fig.6

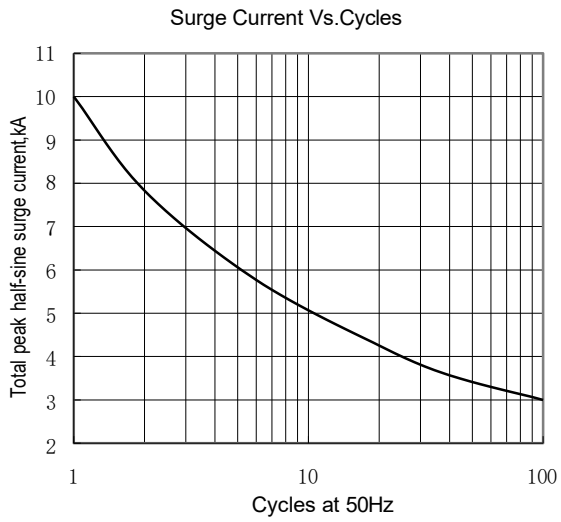


Fig.7

Outline:

