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

$I_{F(AV)}$ 4000A
V_{RRM} 2200 ～ 3000V
I_{FSM} 45 kA
I^2t 10125 10^3A^2S

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	160			4000	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms		160	2200		3000	V
I_{RRM}	Repetitive peak current	at V_{RRM} tp=10ms		160			200	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}		160			45	kA
I^2t	I^2t for fusing coordination						10125	10^3A^2s
V_{FO}	Threshold voltage			160			0.90	V
r_F	Forward slope resistance						0.099	mΩ
V_{FM}	Peak forward voltage	I_{FM}=5000A, F=40kN		25			1.54	V
Q_{rr}	Recovery charge	I_{FM}=2000A, tp=4000μs, di/dt=-20A/μs, V_R=100V		160		5000		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Double side cooled Clamping force 40kN					0.010	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink						0.003	
F_m	Mounting force				35		47	kN
T_{vj}	Junction temperature				-40		160	°C
T_{stg}	Stored temperature				-40		160	°C
W_t	Weight					1460		g
Outline	P46a							

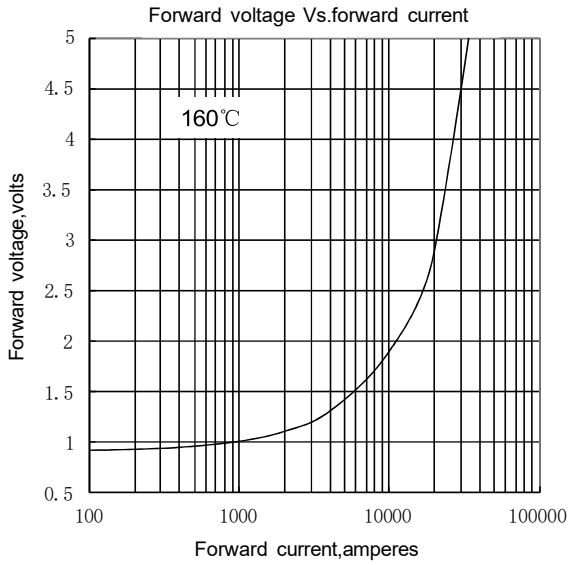

Fig.1

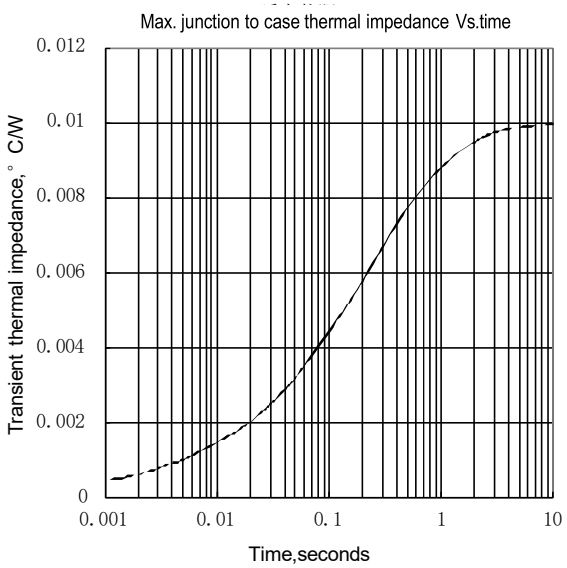

Fig.2

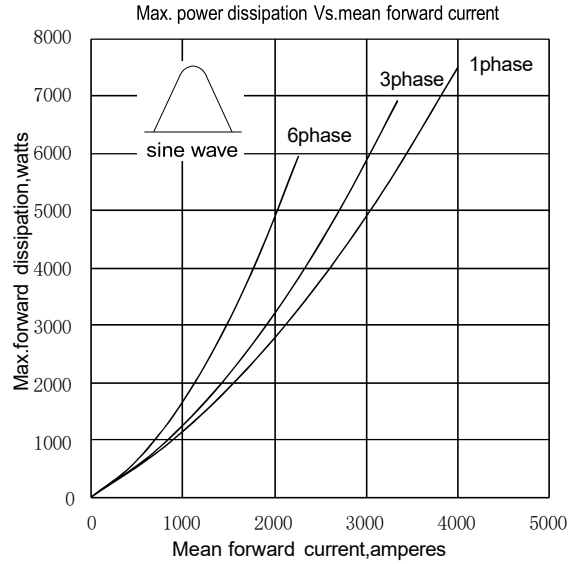

Fig.3

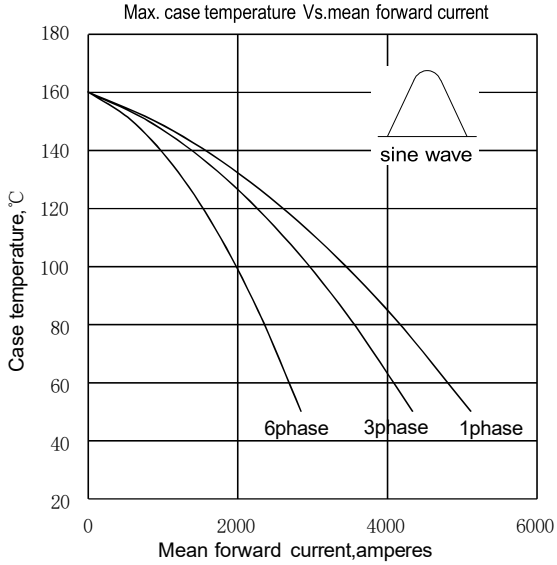

Fig.4

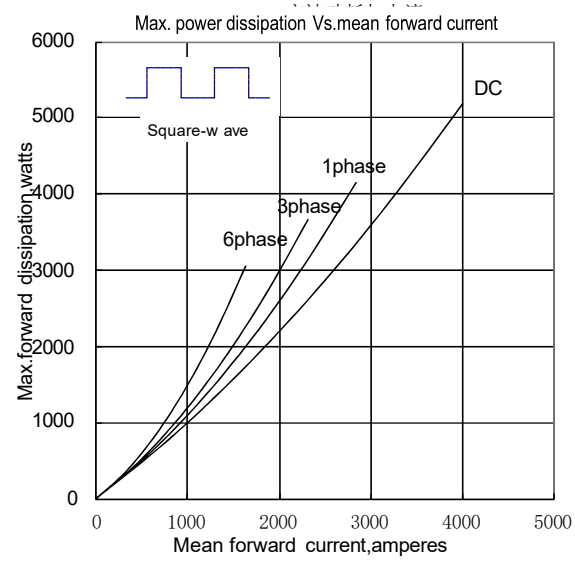

Fig.5

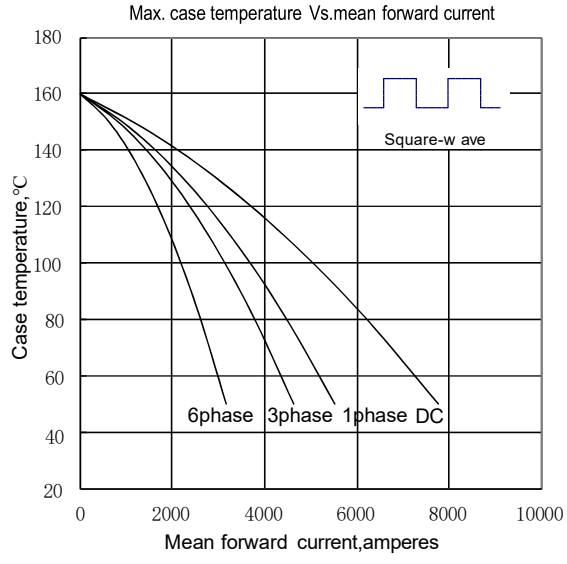

Fig.6

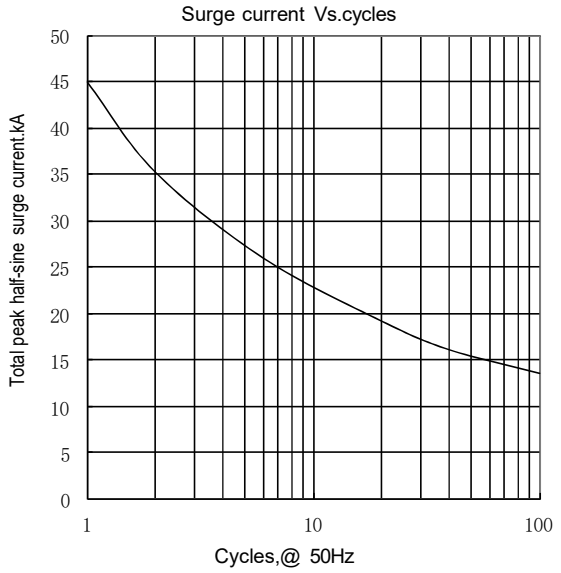

Fig.7

utline: