

Features

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

I_{F(AV)} 7040A
V_{RRM} 2100V ~ 3000V
I_{FSM} 80 kA
I²t 32000 10³A²S

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 _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			7040	A
V _{RRM}	Repetitive peak reverse voltage	tp=10ms		160	2100		3000	V
I _{RRM}	Repetitive peak current	at V _{RRM}		160			250	mA
I _{FSM}	Surge forward current	10ms half sine wave		160			80	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}					32000	A ² s*10 ³
V _{FO}	Threshold voltage			160			0.92	V
r _F	Forward slope resistance						0.07	mΩ
V _{FM}	Peak forward voltage	I _{FM} =6000A, F=90kN		160			1.80	V
Q _{rr}	Recovery charge	I _{FM} =2000A, tp=4000μs, di/dt=-20A/μs, V _R =100V		160		8000		μC
R _{th(j-c)}	Thermal resistance Junction to case	D.C. double side cooled Clamping force 90kN					0.005	°C/W
R _{th(c-h)}	Thermal resistance case to heat sink						0.0015	
F _m	Mounting force				81		108	kN
T _{vj}	Junction temperature				-40		160	°C
T _{stg}	Stored temperature				-40		160	°C
W _t	Weight					2000		g
Outline	P48							

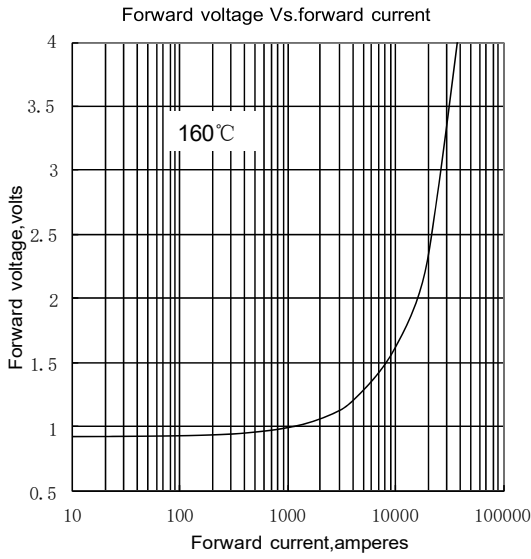


Fig.1

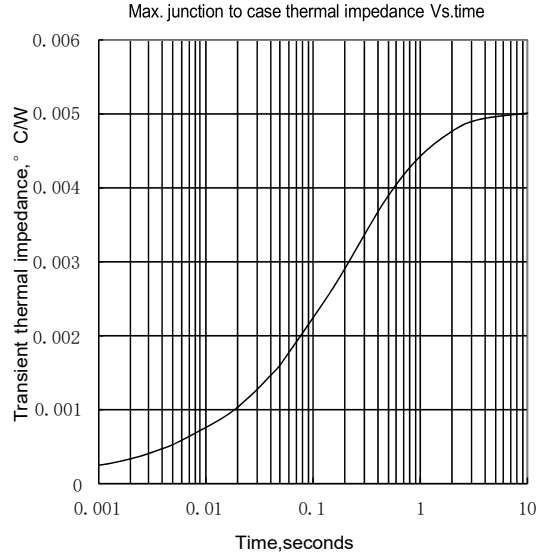


Fig.2

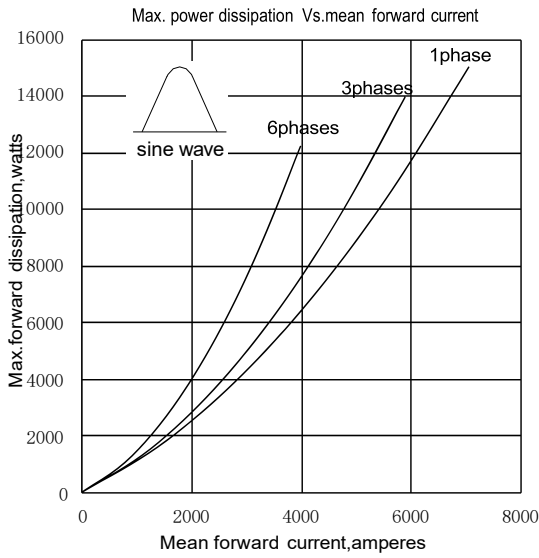


Fig.3

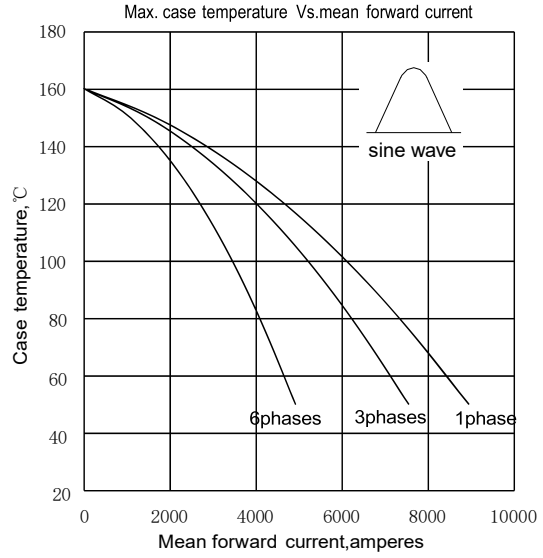


Fig.4

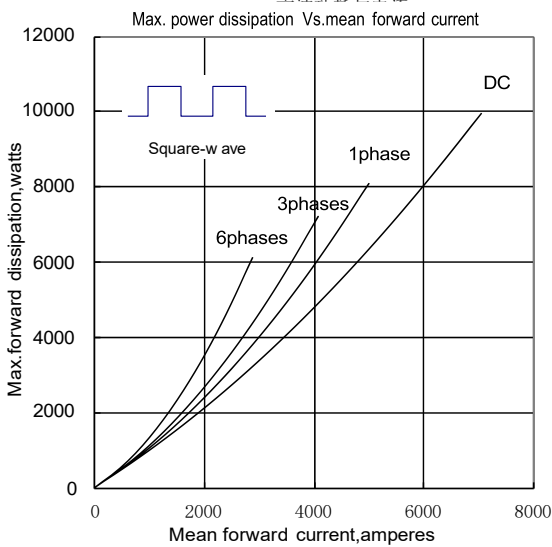


Fig.5

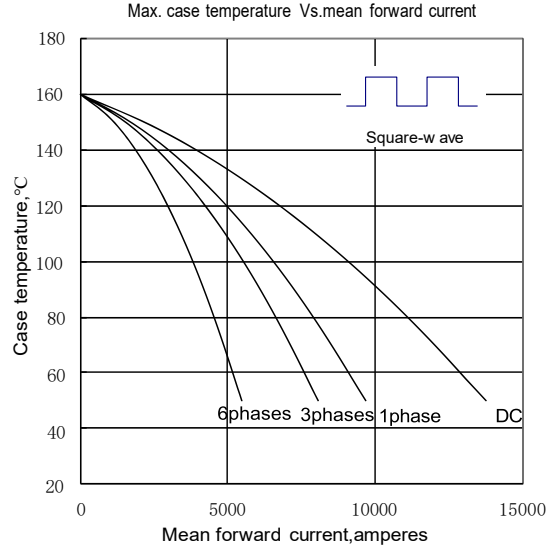


Fig.6

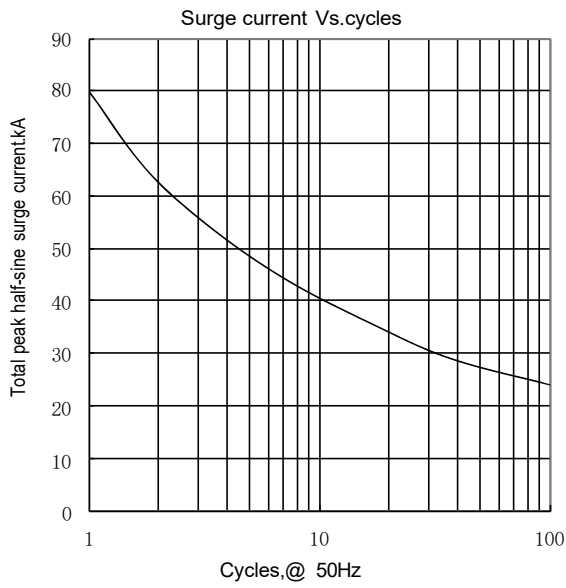


Fig.7

Outline:

