

Features

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

$I_{F(AV)}$	860A
V_{RRM}	3200 ~ 4200V
I_{FSM}	11 kA
I^2t	605 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,	$T_C=85^\circ\text{C}$	160			860	A
			$T_C=100^\circ\text{C}$				750	
V_{RRM}	Repetitive peak reverse voltage	tp=10ms		160	3200		4200	V
I_{RRM}	Repetitive peak current	at V_{RRM}		160			50	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$		160			11	kA
I^2t	I^2t for fusing coordination						605	A ² s*10 ³
V_{FO}	Threshold voltage			160			0.90	V
r_F	Forward slop resistance							0.75
V_{FM}	Peak on-state voltage	$I_{FM}=1500A, F=15kN$		160			2.03	V
Q_{rr}	Recovery charge	$I_{FM}=1000A, tp=4000\mu s, di/dt=-20A/\mu s, V_R=100V$		160		2000		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Double side cooled Clamping force 15kN					0.035	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.010	
F_m	Mounting force				10		20	kN
T_{vj}	Junction temperature				-40		160	°C
T_{stg}	Stored temperature				-40		160	°C
W_t	Weight					240		g
Outline	P39							

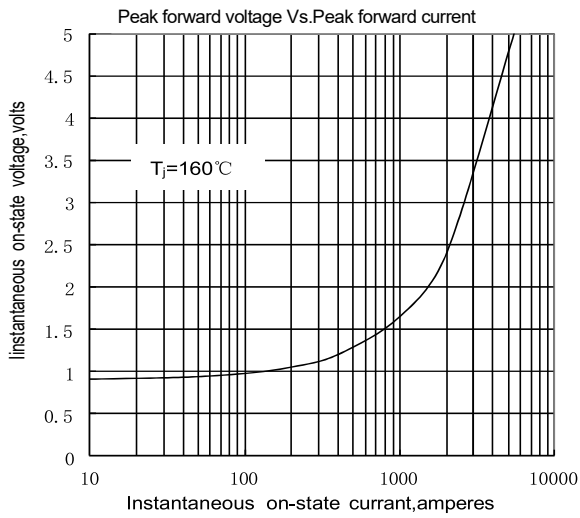


Fig.1

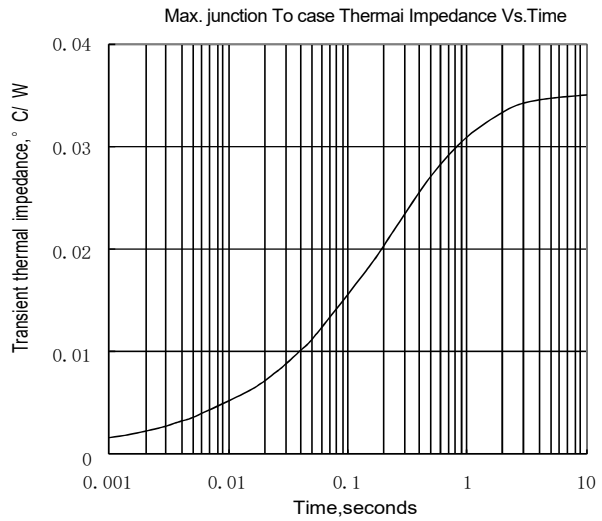


Fig.2

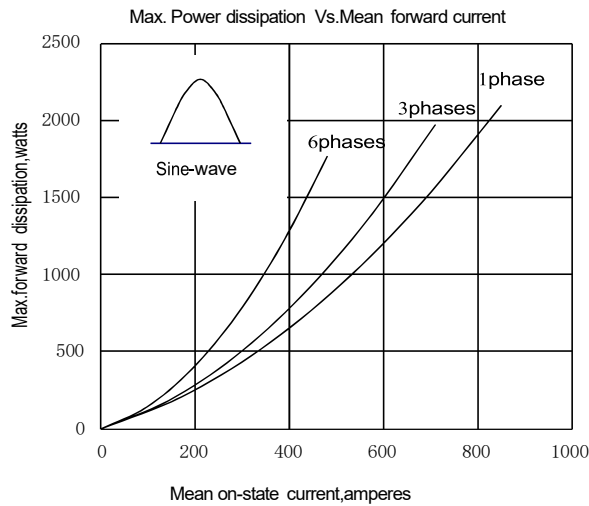


Fig.3

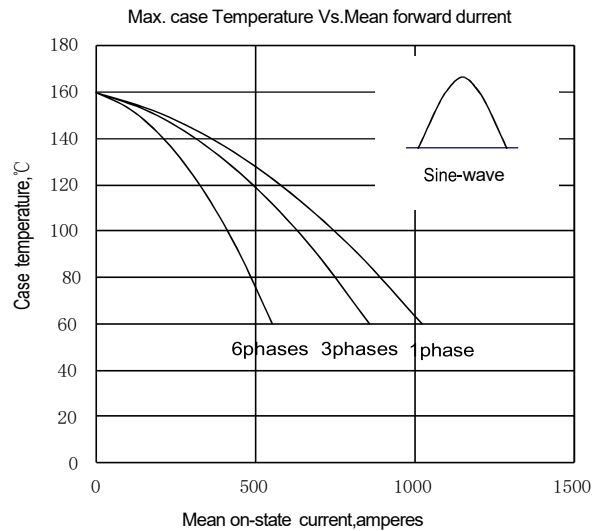


Fig.4

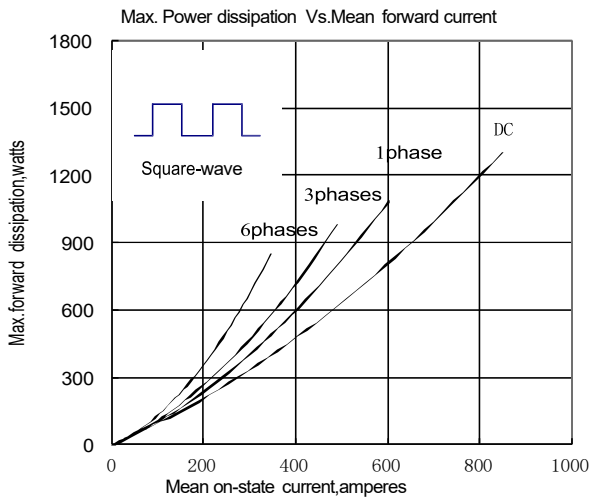


Fig.5

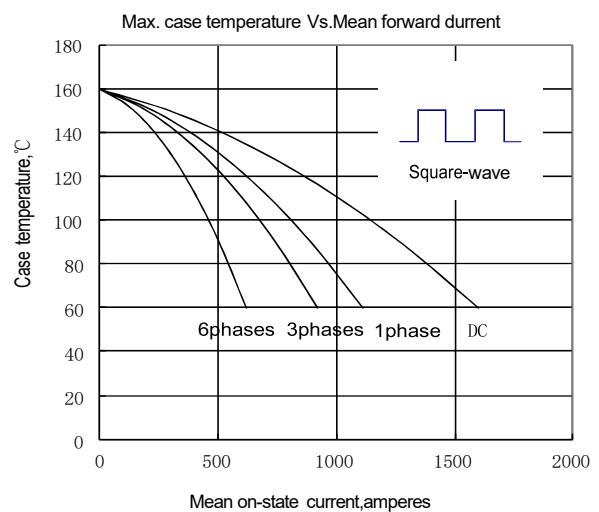


Fig.6

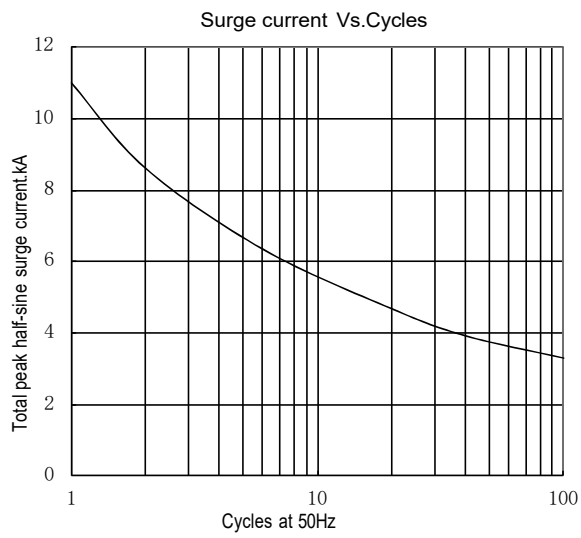


Fig.7

Outline:

