

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

$I_{F(AV)}$ 5220A
 V_{RRM} 1100~2000 V
 I_{FSM} 56.4 kA
 I^2t 15904 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, $T_C=85°C$				5220	A
V_{RRM}	Repetitive peak reverse voltage	$V_{RRM} tp=10ms$ $V_{RSM}= V_{RRM}+100V$	175	1100		2000	V
I_{RRM}	Repetitive peak current	at V_{RRM}	175			200	mA
I_{FSM}	Surge forward current	10ms half sine wave	175			56.4	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				15904	$A^2s \cdot 10^3$
V_{FO}	Threshold voltage		175			0.84	V
r_F	Forward slope resistance					0.069	mΩ
V_{FM}	Peak forward voltage	$I_{FM}=6800A, F=40kN$	175			1.31	V
Q_{rr}	Recovery charge	$I_{FM}=2000A, tp=2000\mu s, di/dt=-20A/\mu s,$ $V_R=50V$	175		5500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 40kN				0.010	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.003	
F_m	Mounting force			35		47	kN
T_{stg}	Stored temperature			-40		175	°C
W_t	Weight				1100		g
Outline	P46						

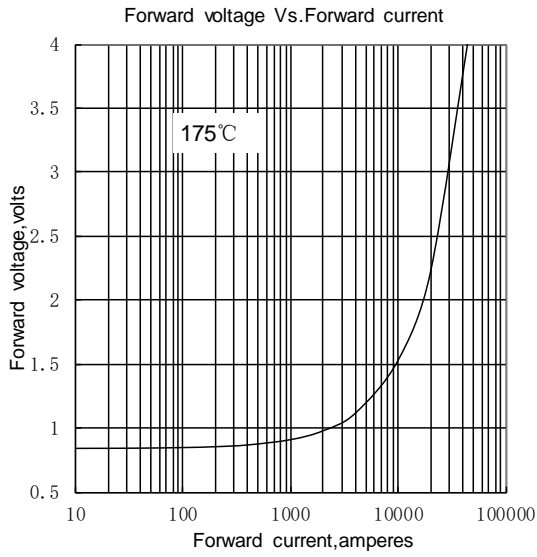


Fig.1

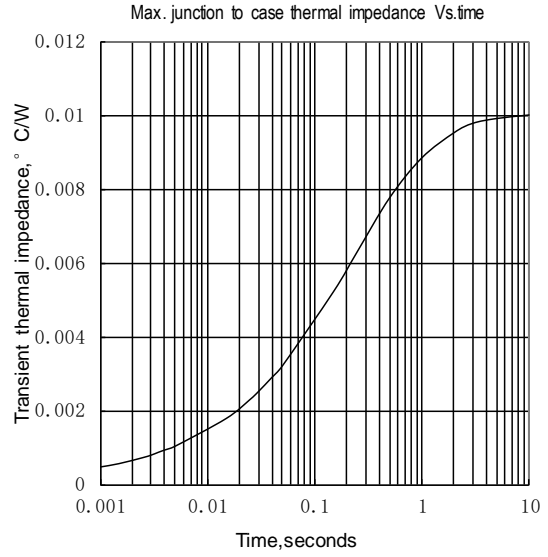


Fig.2

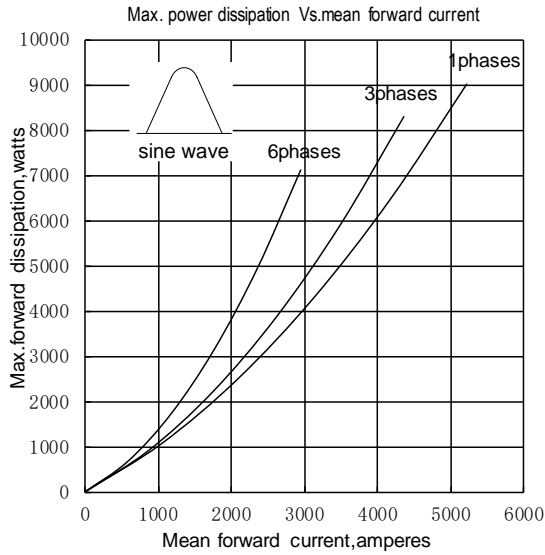


Fig.3

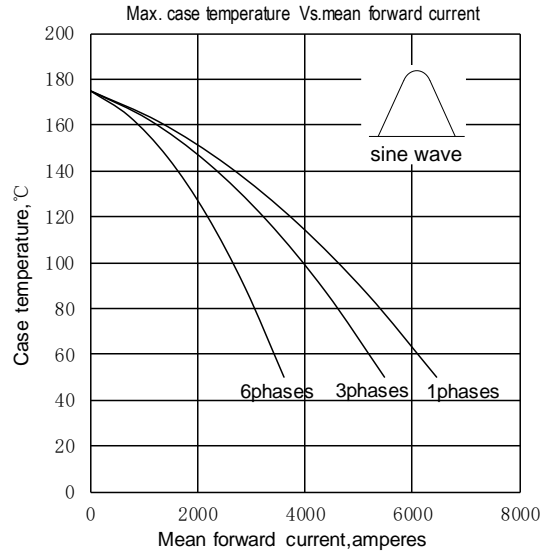


Fig.4

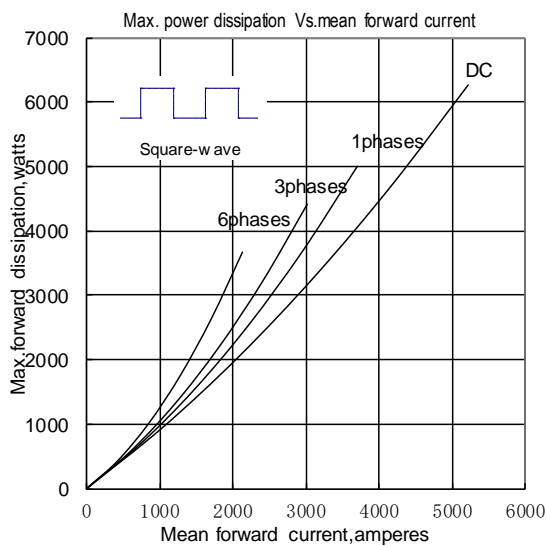


Fig.5

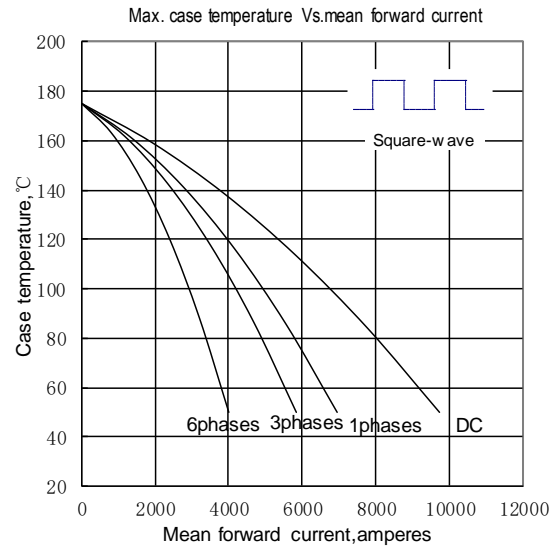


Fig.6

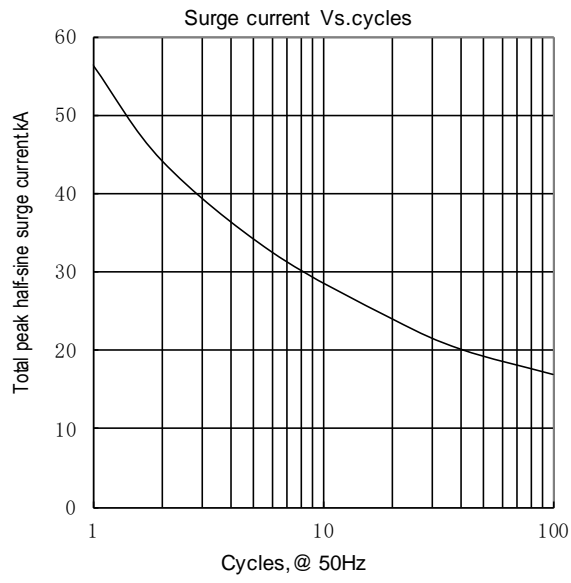


Fig.7

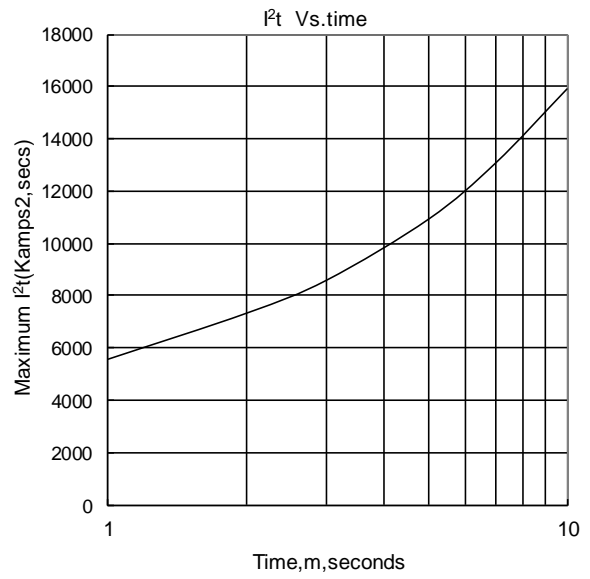


Fig.8

