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

$I_{F(AV)}$	**1080A**
V_{RRM}	**1100~2000 V**
I_{FSM}	**9 kA**
I^2t	**405 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	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 V_R=0.6V_{RRM}		175			9	kA
I^2t	I^2t for fusing coordination						405	A^2s*10^3
V_{FO}	Threshold voltage			175			0.98	V
r_F	Forward slope resistance						0.33	mΩ
V_{FM}	Peak forward voltage	I_{FM}=3770A, F=7.0kN		175			2.22	V
Q_{rr}	Recovery charge	I_{FM}=2000A,tp=2000μs, di/dt=-20A/μs, V_R=50V		175		1600		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180^0 sine· double side cooled Clamping force 7.0kN					0.045	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.010	
F_m	Mounting force				5.3		10	kN
T_{stg}	Stored temperature				-40		175	°C
W_t	Weight					80		g
Outline	P33							

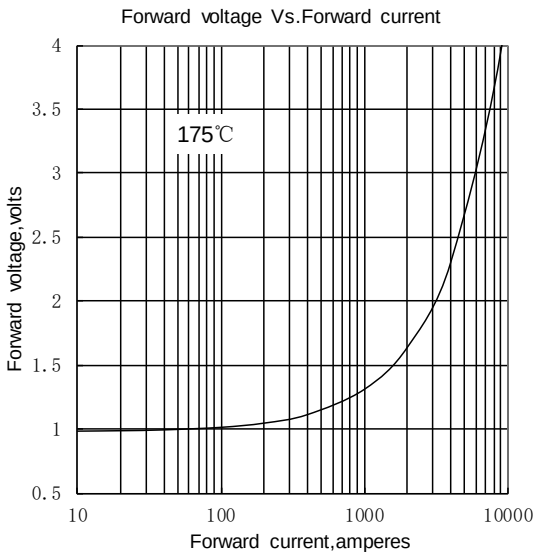


Fig.1

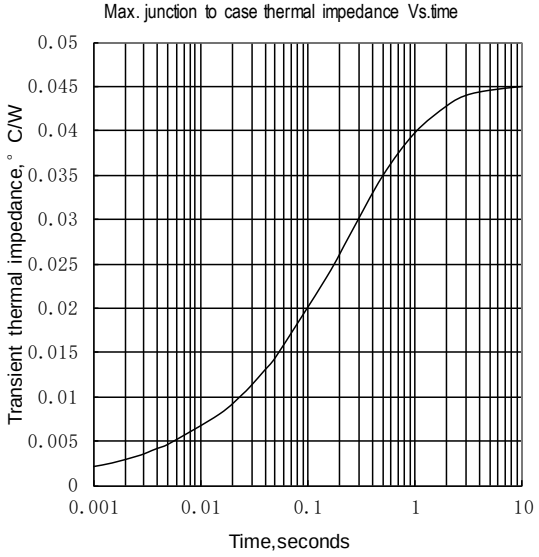


Fig.2

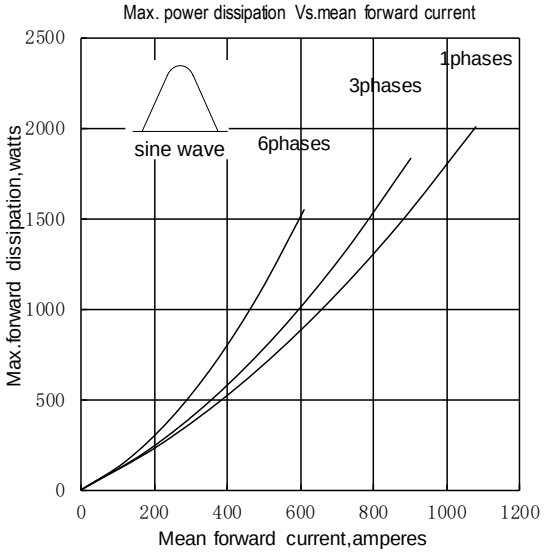


Fig.3

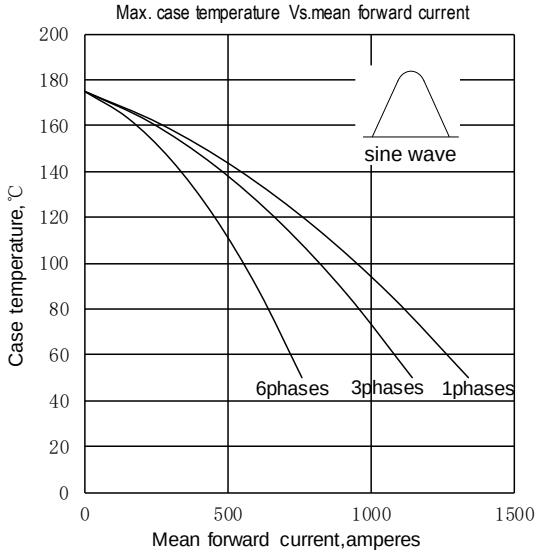


Fig.4

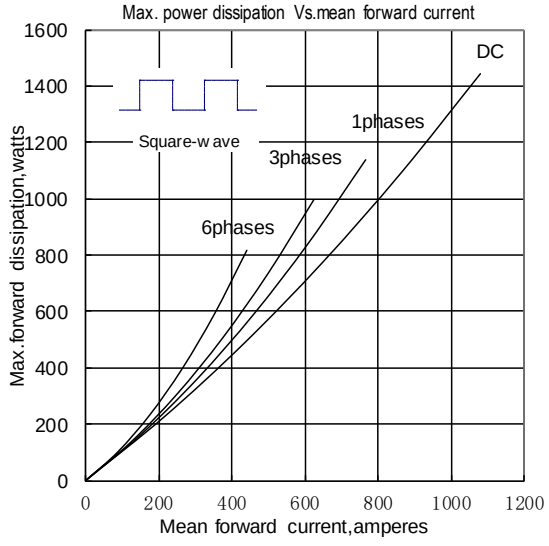


Fig.5

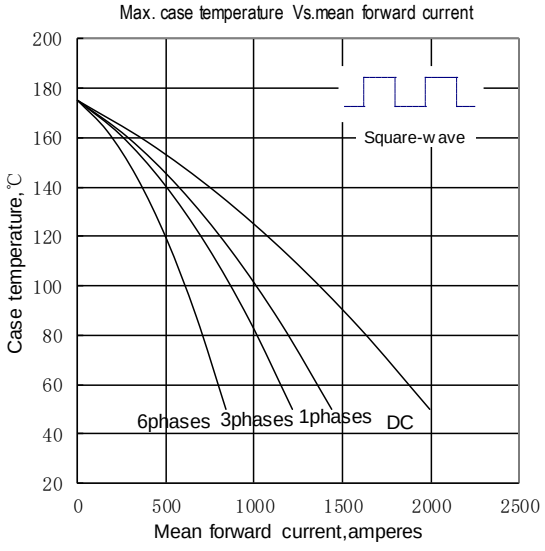


Fig.6

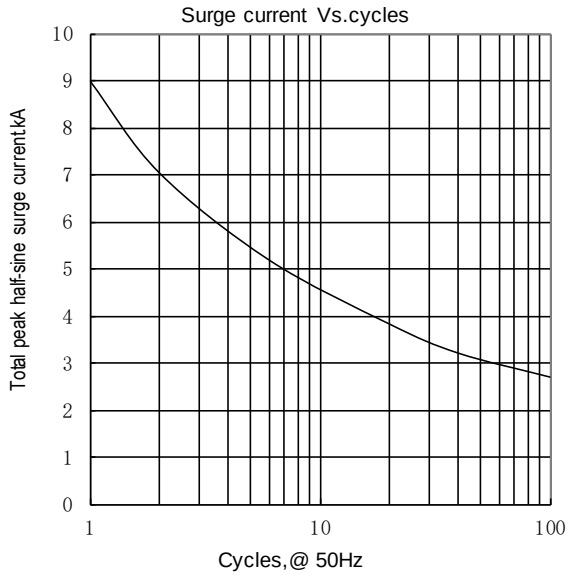

Surge current Vs.cycles
Total peak half-sine surge current:kA
10
9
8
7
6
5
4
3
2
1
0
1
10
100
Cycles,@ 50Hz

Fig.7

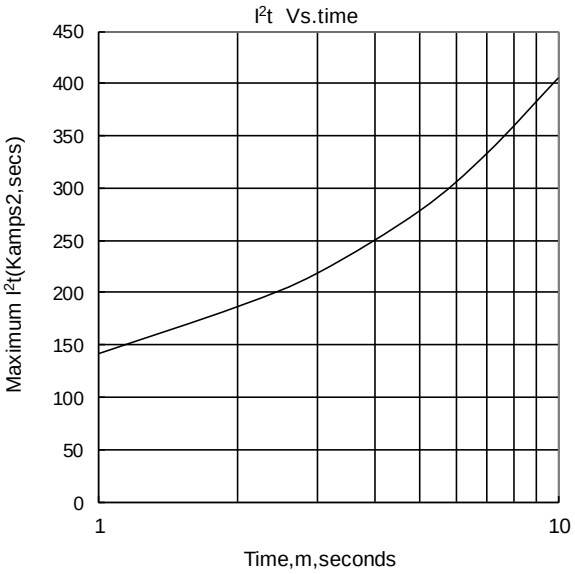
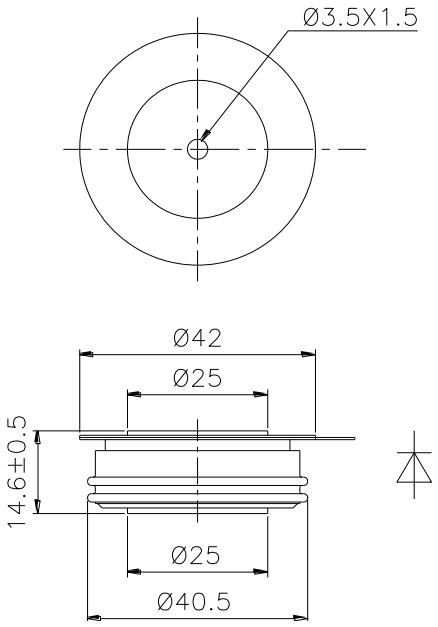

I²t Vs.time
Maximum I²t(Kamps2,secs)
450
400
350
300
250
200
150
100
50
0
1
10
Time,m,seconds

Fig.8


Ø3.5X1.5
Ø42
Ø25
14.6±0.5
Ø25
Ø40.5