

Features

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

$I_{F(AV)}$ 4280A
 V_{RRM} 200~400 V
 I_{FSM} 38 kA
 I^2t 7220 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,	$T_c=85^\circ\text{C}$	175			4280	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms		175	200		400	V
I_{RRM}	Repetitive peak current	at V_{RRM}		175			50	mA
I_{FSM}	Surge forward current	10ms half sine wave. $V_R=0.6V_{RRM}$		175			38	kA
I^2t	I^2t for fusing coordination						7220	A ² s*10 ³
V_{FO}	Threshold voltage			175			0.69	V
r_F	Forward slope resistance						0.042	mΩ
V_{FM}	Peak on-state voltage	$I_{FM}=9000A, F=24kN$		175			1.30	V
Q_{rr}	Recovery charge	$I_{FM}=2000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$		175		1000		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	DC. double side cooled Clamping force 24.0kN					0.0135	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.004	
F_m	Mounting force				19		26	kN
T_{stg}	Stored temperature				-40		175	°C
W_t	Weight					160		
Outline	P49							

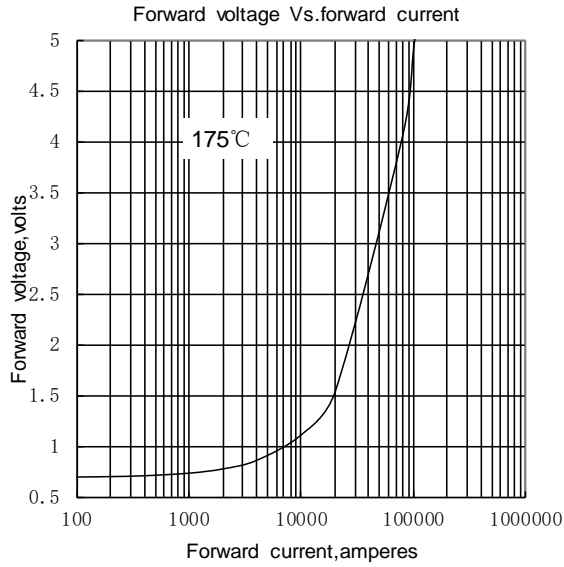


Fig.1

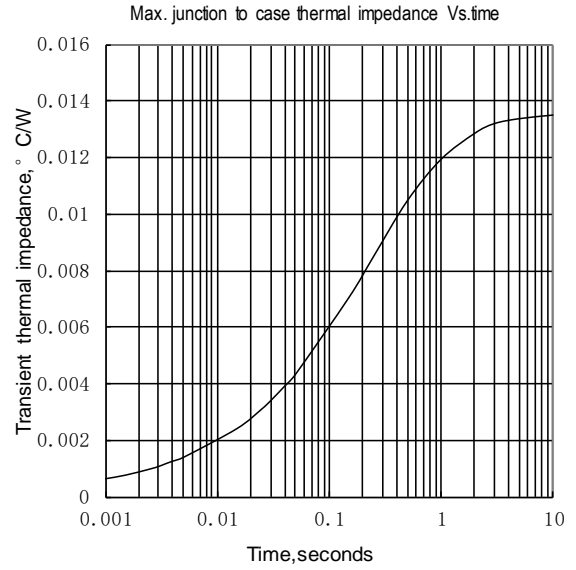


Fig.2

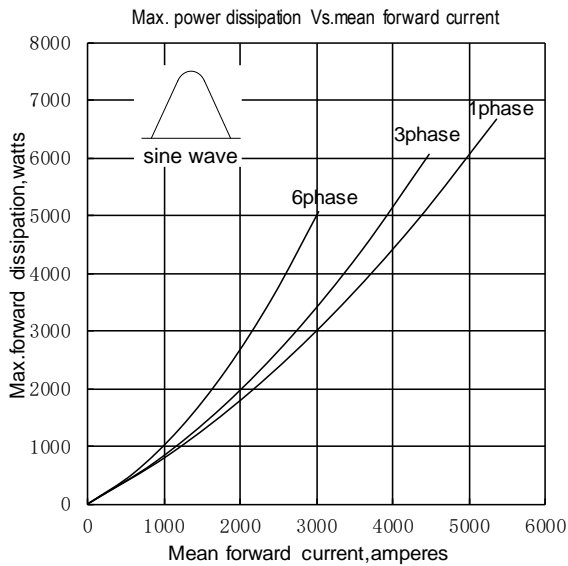


Fig.3

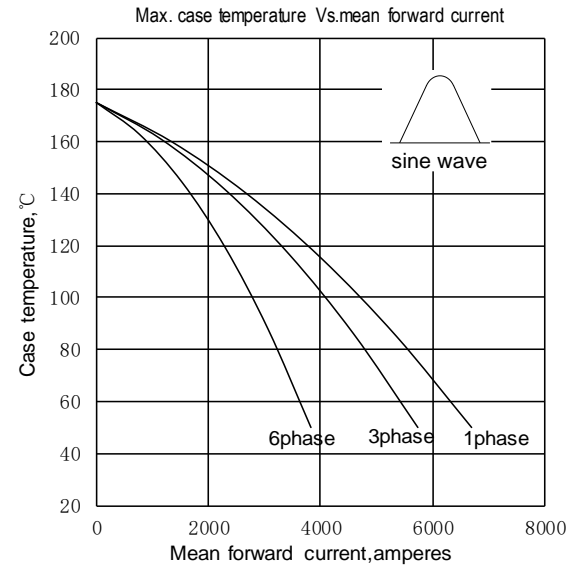


Fig.4

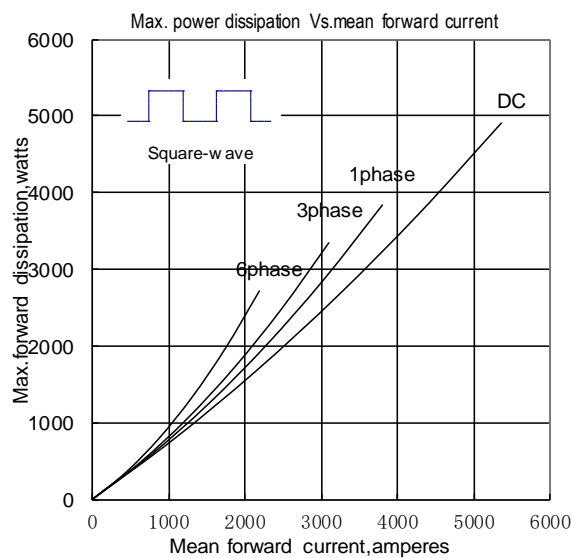


Fig.5

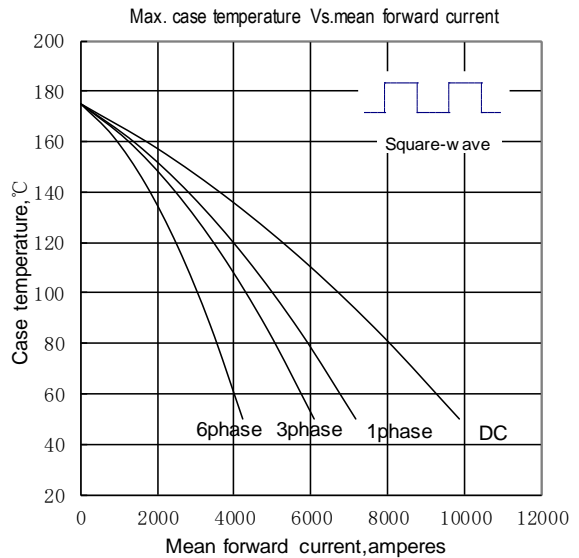


Fig.6

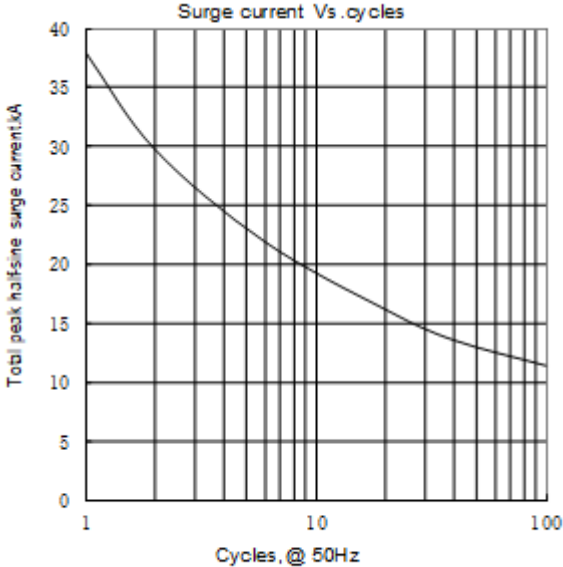
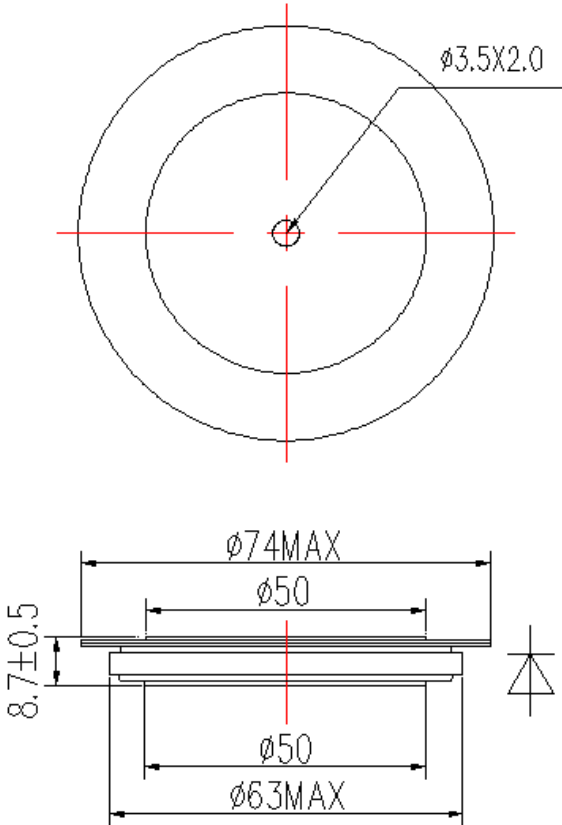


Fig.7



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