

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

$I_{F(AV)}$ **7090A**
 V_{RRM} **1100~2000 V**
 I_{FSM} **83 kA**
 I^2t **34445 10³A²S**



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,	$T_C=85^{\circ}C$	175			7090	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms		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			83	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$					34445	A ² s*10 ³
V_{FO}	Threshold voltage			175			0.68	V
r_F	Forward slope resistance						0.065	mΩ
V_{FM}	Peak forward voltage	$I_{FM}=5000A, F=70kN$		175			1.01	V
Q_{rr}	Recovery charge	$I_{FM}=2000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$		175		6000		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	DC: double side cooled Clamping force 70kN					0.007	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.002	
F_m	Mounting force				63		84	kN
T_{stg}	Stored temperature				-40		175	°C
W_t	Weight					1390		g
Outline	P47							

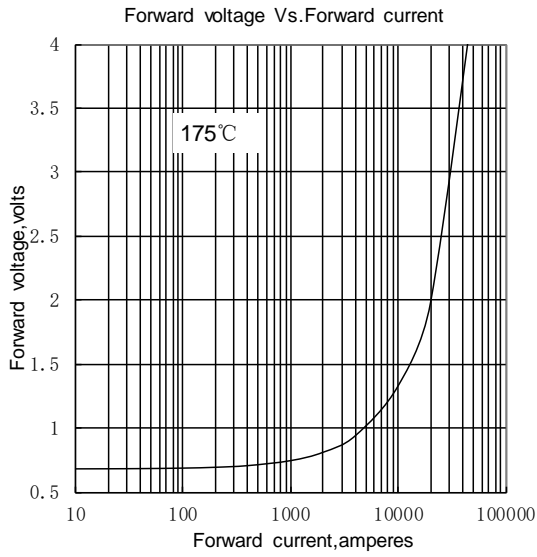


Fig.1

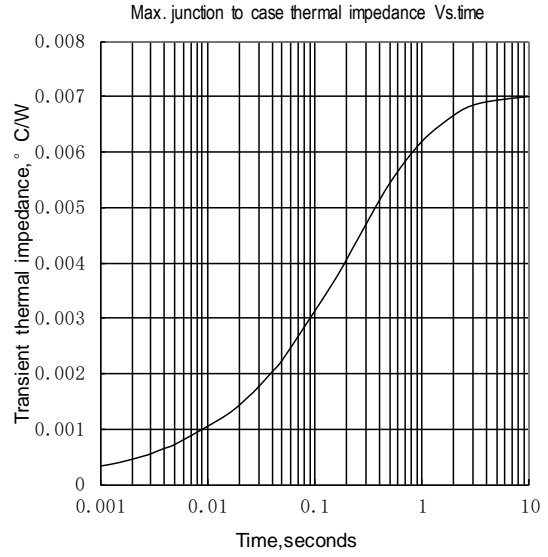


Fig.2

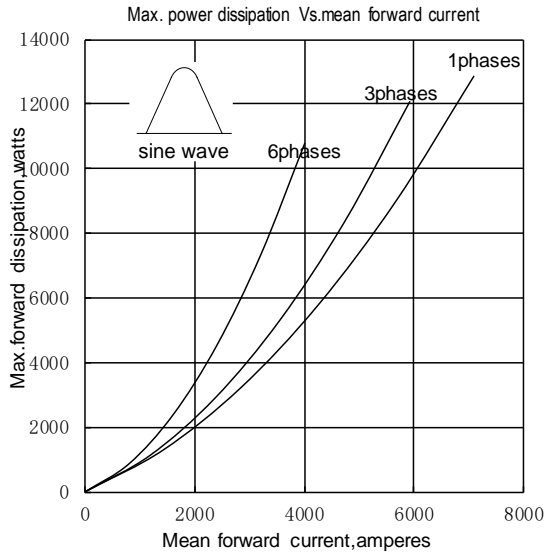


Fig.3

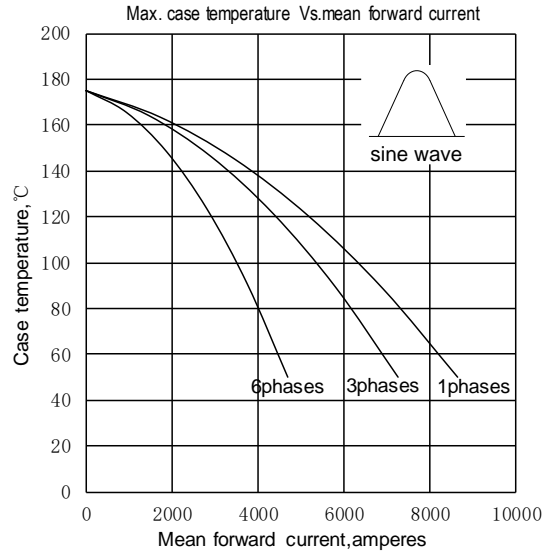


Fig.4

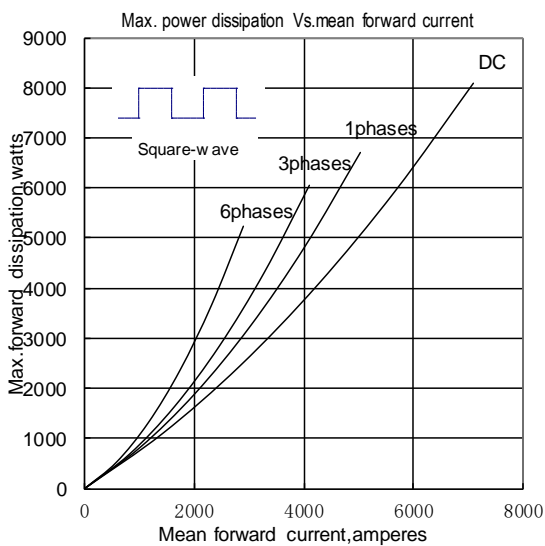


Fig.5

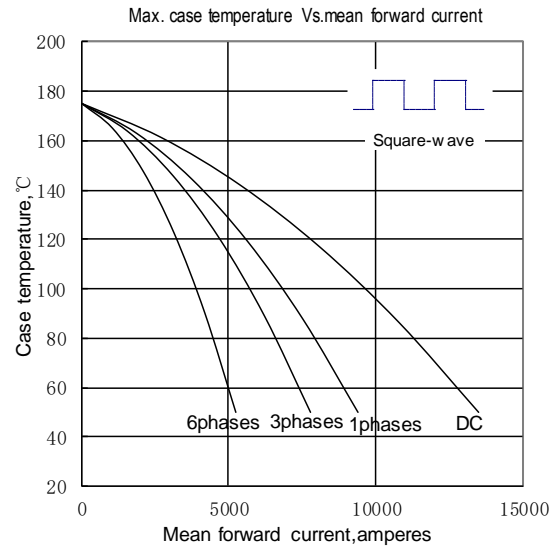


Fig.6

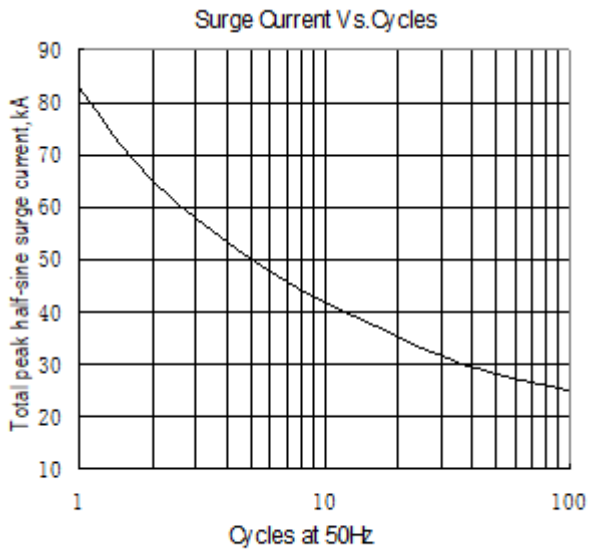
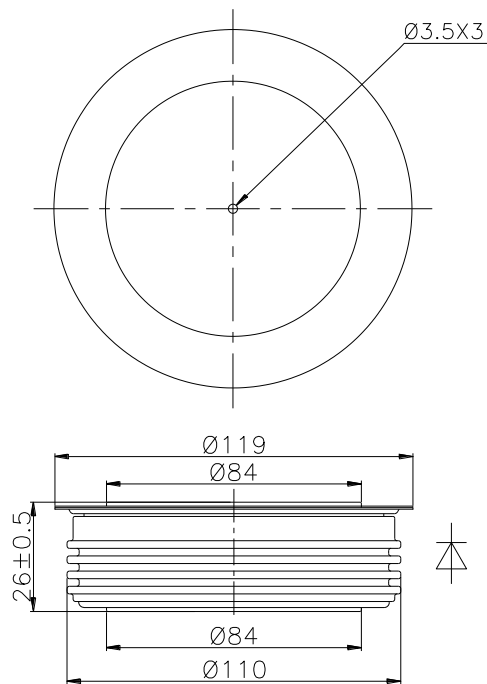


Fig.7



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