

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

$I_{F(AV)}$ 3500 A
 V_{RRM} 3100~4200 V
 I_{FSM} 41 kA
 I^2t 8405 10^3A^2S



SYMBOL	CHARACTERISTIC	TEST CONDITIONS		$T_j(^{\circ}C)$	VALUE			UNIT
					Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,	$T_C=85^{\circ}C$	160			3500	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms		160	3100		4200	V
I_{RRM}	Repetitive peak current	at V_{RRM}		160			200	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$		160			41	kA
I^2t	I^2t for fusing coordination						8405	$A^2s \cdot 10^3$
V_{FO}	Threshold voltage			160			0.95	V
r_F	Forward slope resistance						0.138	mΩ
V_{FM}	Peak forward voltage	$I_{FM}=6000A, F=40kN$		160			1.78	V
Q_{rr}	Recovery charge	$I_{FM}=2000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$		160		6000		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	DC: double side cooled Clamping force 40kN					0.010	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.003	
F_m	Mounting force				35		47	kN
T_{stg}	Stored temperature				-40		160	$^{\circ}C$
W_t	Weight					1100		g
Outline	P46							

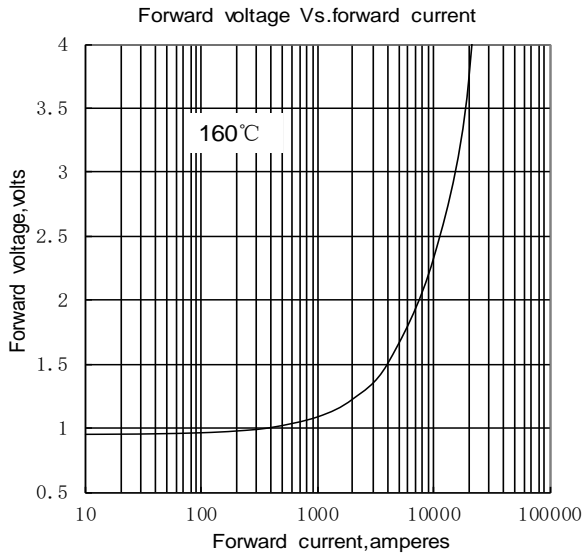


Fig.1

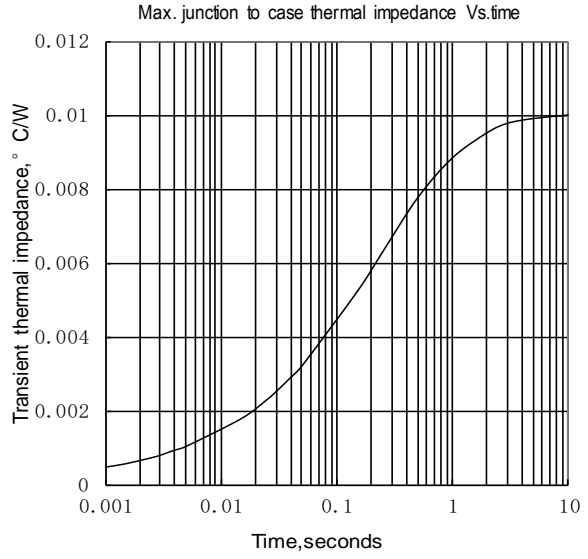


Fig.2

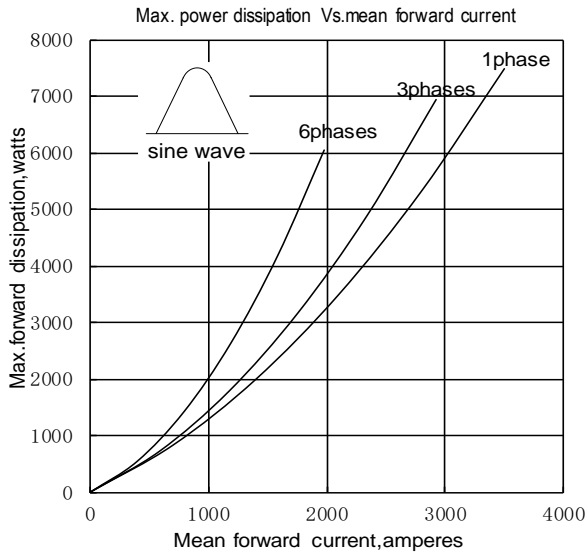


Fig.3

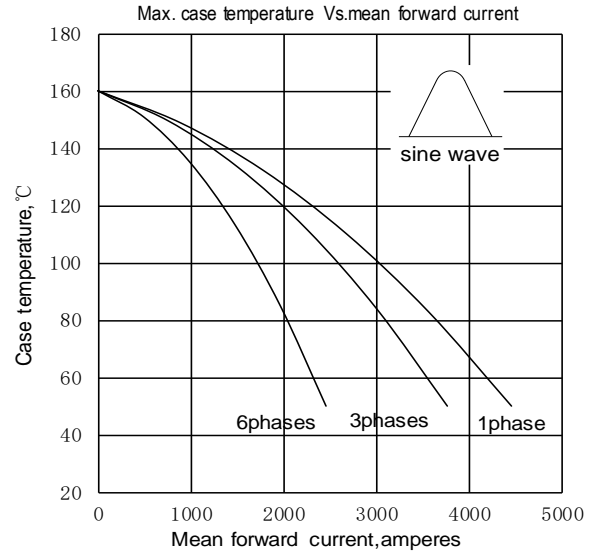


Fig.4

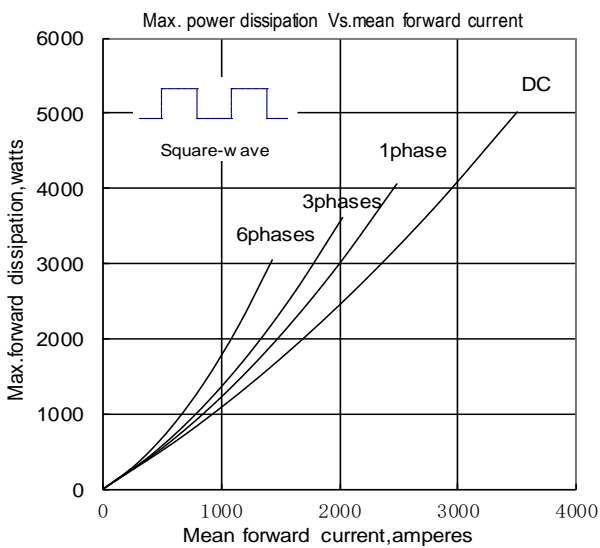


Fig.5

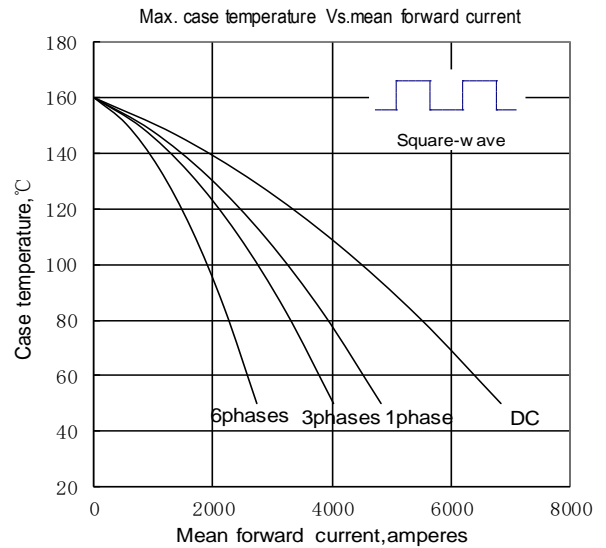


Fig.6

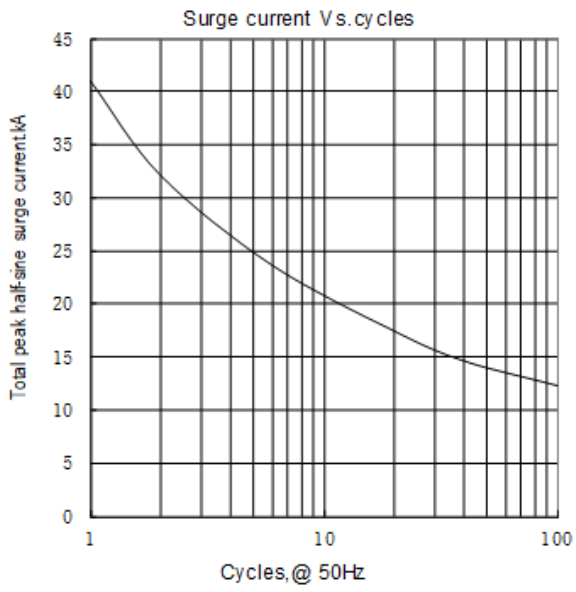
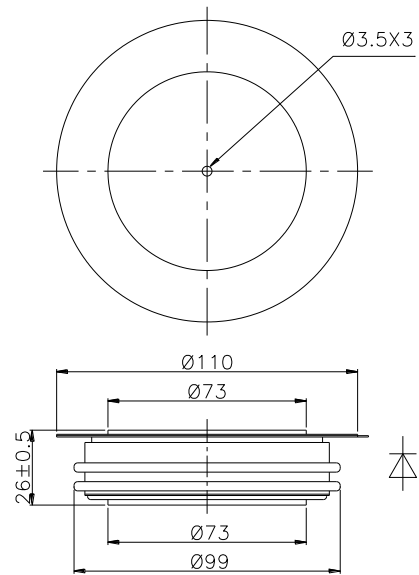


Fig.7



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