

### 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

$I_{F(AV)}$	<b>3090 A</b>
$V_{RRM}$	<b>3100~4200 V</b>
$I_{FSM}$	<b>35 kA</b>
$I^2t$	<b>6125 <math>10^3 A^2s</math></b>



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			3090	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms		160	3100		4200	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$		160			160	mA
$I_{FSM}$	Surge forward current	10ms half sine wave		160			35	kA
$I^2t$	$I^2t$ for fusing coordination	$V_R=0.6V_{RRM}$					6125	$A^2s \cdot 10^3$
$V_{FO}$	Threshold voltage			160			0.88	V
$r_F$	Forward slope resistance						0.15	mΩ
$V_{FM}$	Peak forward voltage	$I_{FM}=3000A, F=35kN$		25			1.63	V
$Q_{rr}$	Recovery charge	$I_{FM}=2000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$		160		5700		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 35kN					0.012	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.003		
$F_m$	Mounting force				30		40	kN
$T_{stg}$	Stored temperature				-40		160	°C
$W_t$	Weight					880		g
Outline	ZT60cT70							

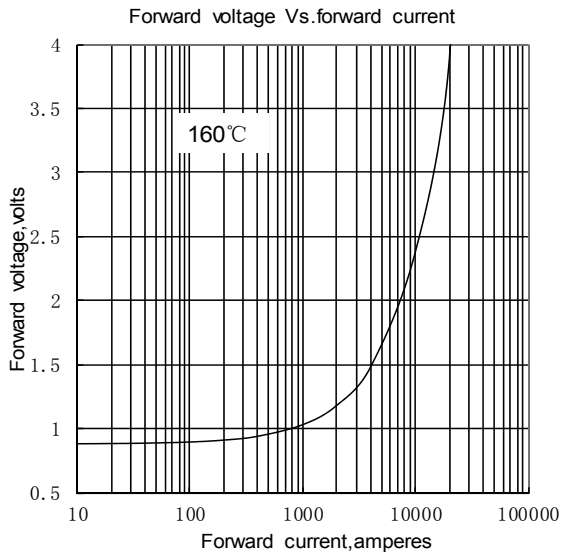


Fig.1

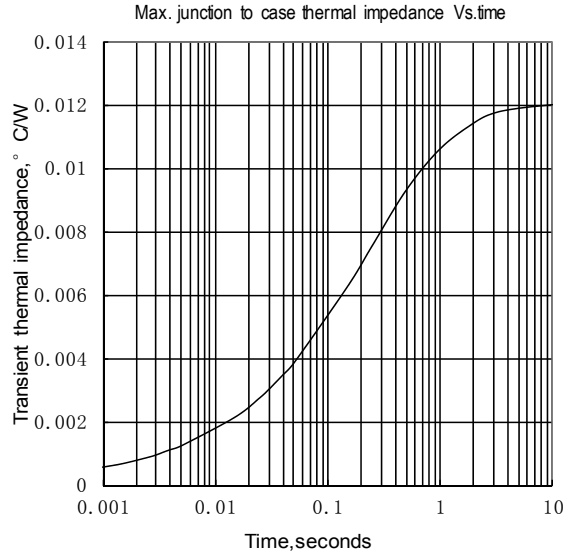


Fig.2

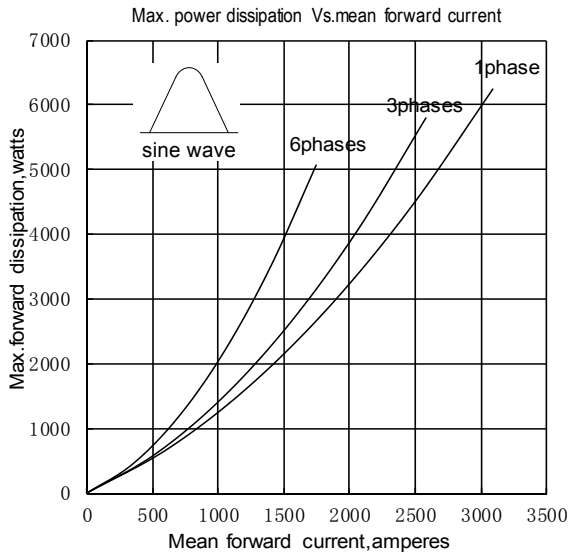


Fig.3

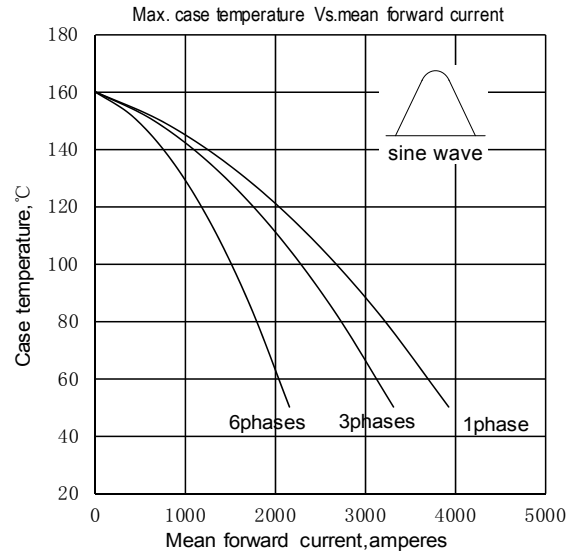


Fig.4

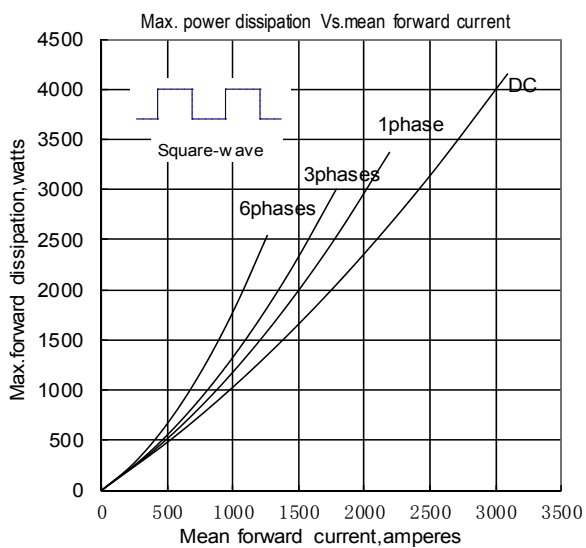


Fig.5

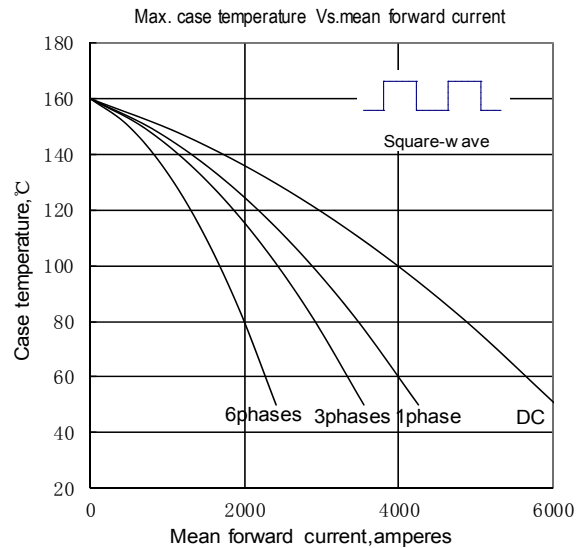


Fig.6

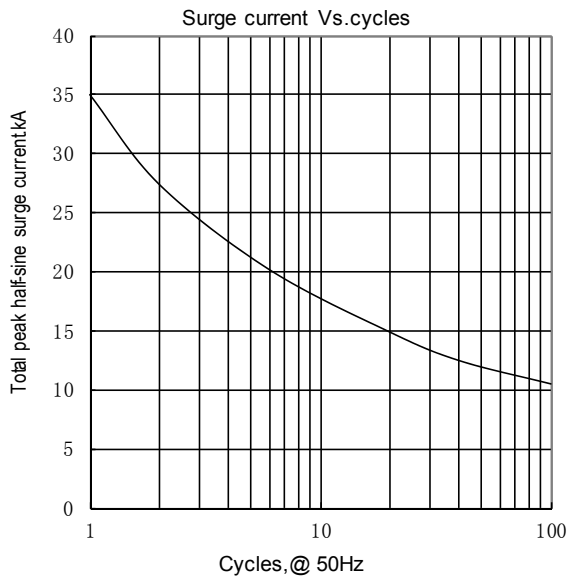


Fig.7

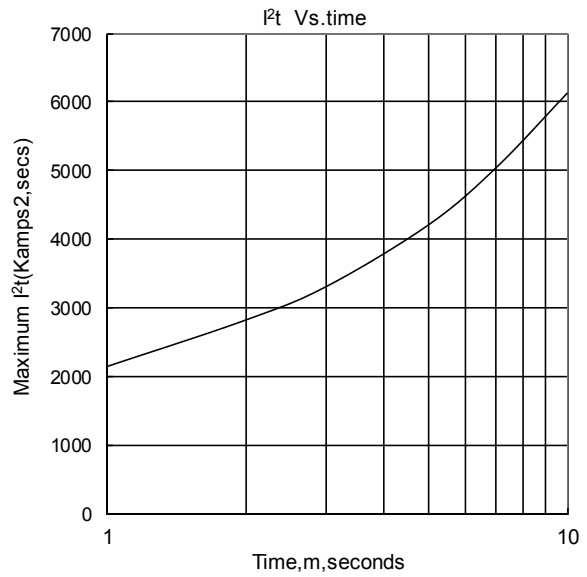


Fig.8

Outline:

