

### 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>3520 A</b>
$V_{RRM}$	<b>1100~2000 V</b>
$I_{FSM}$	<b>34 kA</b>
$I^2t$	<b>5780 <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,	$T_C=55^{\circ}C$	175			4230	A
			$T_C=85^{\circ}C$				3520	
$V_{RRM}$	Repetitive peak reverse voltage	$V_{RRM}$ tp=10ms $V_{RSM}=V_{RRM}+100V$	175	1100			2000	V
$I_{RRM}$	Repetitive peak current	$V_{RM}=V_{RRM}$	175				120	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	175				34	kA
$I^2t$	$I^2T$ for fusing coordination	$V_R=0.6V_{RRM}$					5780	$A^2s*10^3$
$V_{FO}$	Threshold voltage		175				0.73	V
$r_F$	Forward slop resistance						0.10	mΩ
$V_{FM}$	Peak on-state voltage	$I_{FM}=4000A, F=28kN$	175				1.13	V
$Q_{rr}$	Recovery charge	$I_{FM}=2000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$	175		5000			μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 28kN					0.016	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.004	
$F_m$	Mounting force			21			30	kN
$T_{stg}$	Stored temperature			-40			175	°C
$W_t$	Weight					640		g
Outline	ZT54cT60							

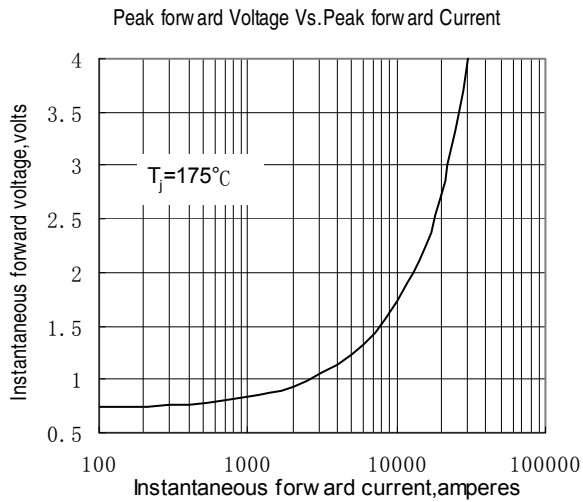


Fig.1

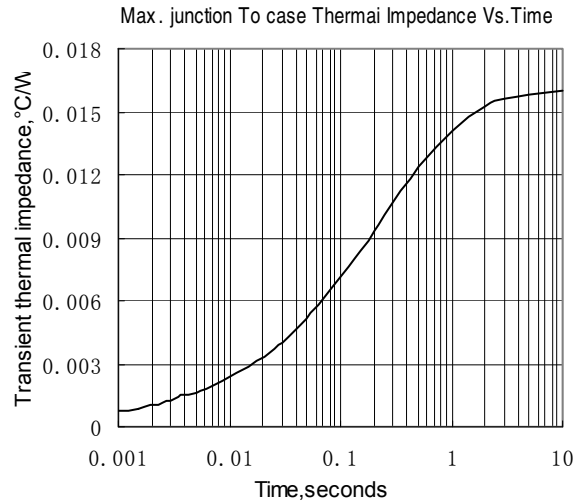


Fig.2

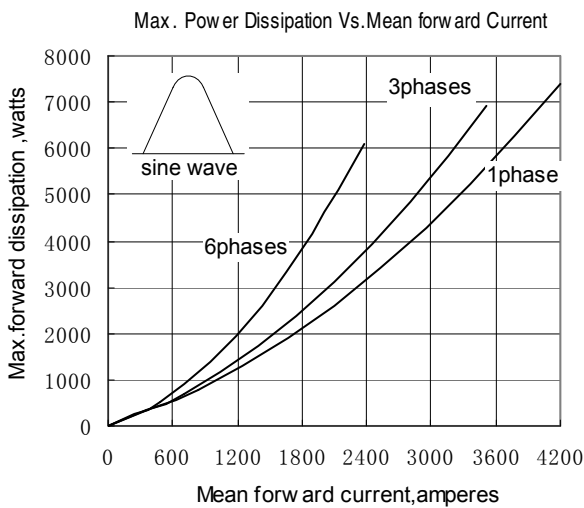


Fig.3

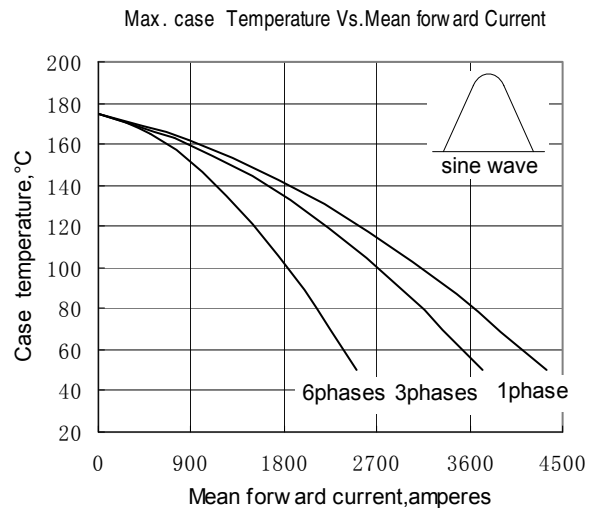


Fig.4

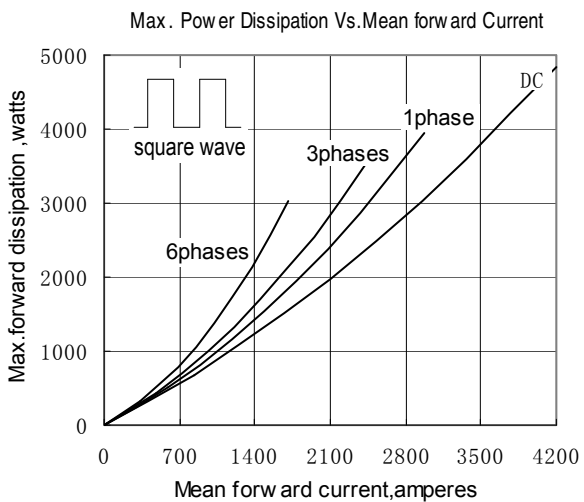


Fig.5

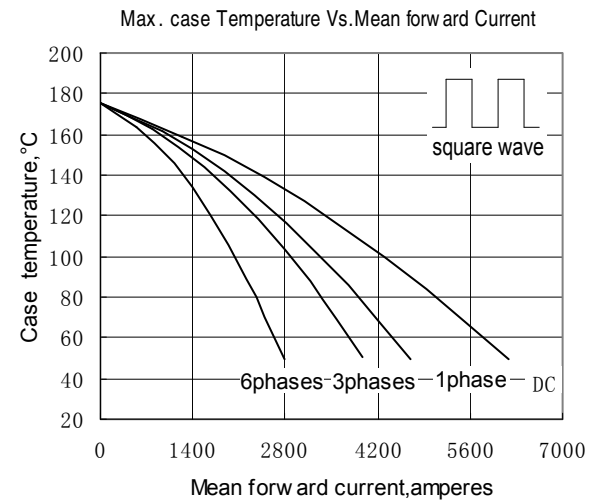


Fig.6

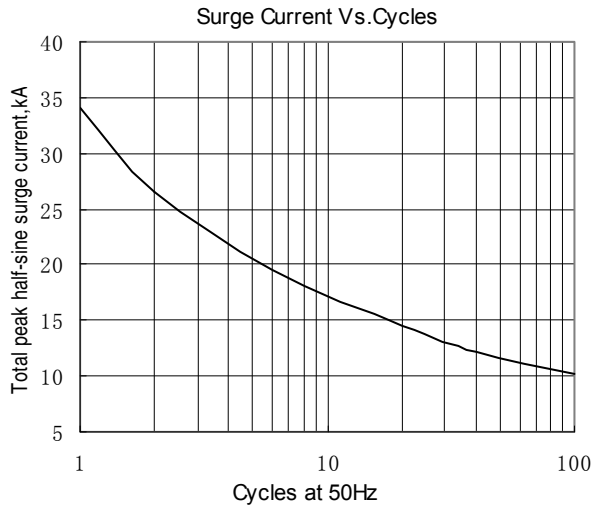


Fig.7

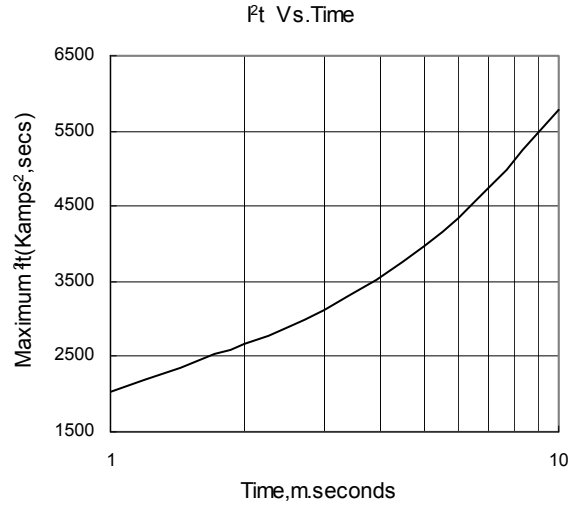


Fig.8

Outline:

