

## 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>1010A</b>
$V_{RRM}$	<b>2100~3000 V</b>
$I_{FSM}$	<b>13 kA</b>
$I^2t$	<b>845 <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			1010	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms		160	2100		3000	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$		160			40	mA
$I_{FSM}$	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$		160			13	kA
$I^2t$	$I^2t$ for fusing coordination						845	$A^2s \times 10^3$
$V_{FO}$	Threshold voltage			160			0.88	V
$r_F$	Forward slope resistance						0.498	$m\Omega$
$V_{FM}$	Peak forward voltage	$I_{FM}=1000A$ , $F=15kN$		25			1.90	V
$Q_{rr}$	Recovery charge	$I_{FM}=2000A$ , tp=2000 $\mu$ s, $di/dt=-20A/\mu s$ , $V_R=50V$		160		2000		$\mu C$
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 15.0kN					0.035	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.010	
$F_m$	Mounting force				10		20	kN
$T_{stg}$	Stored temperature				-40		160	$^{\circ}C$
$W_t$	Weight					250		g
Outline		ZT33cT						

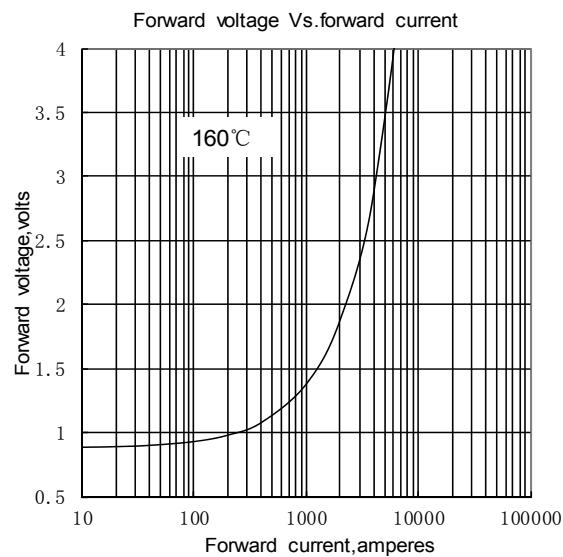


Fig.1

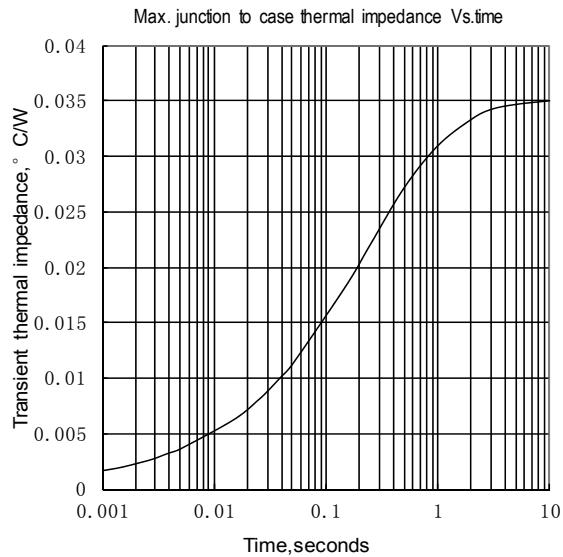


Fig.2

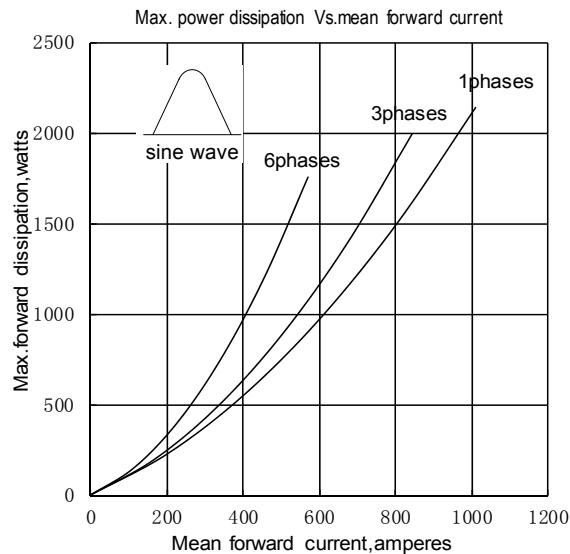


Fig.3

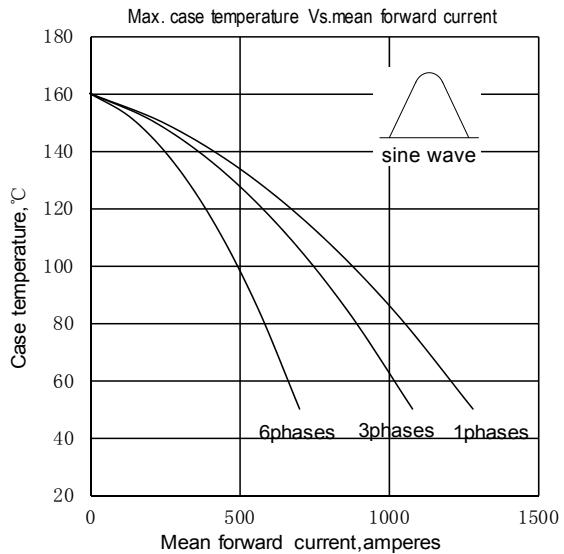


Fig.4

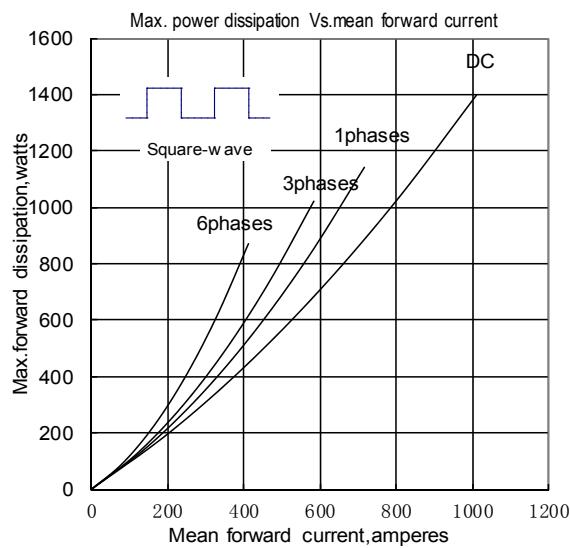


Fig.5

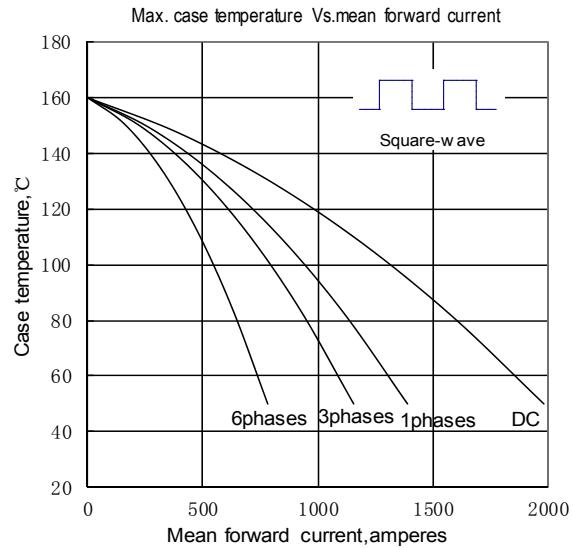


Fig.6

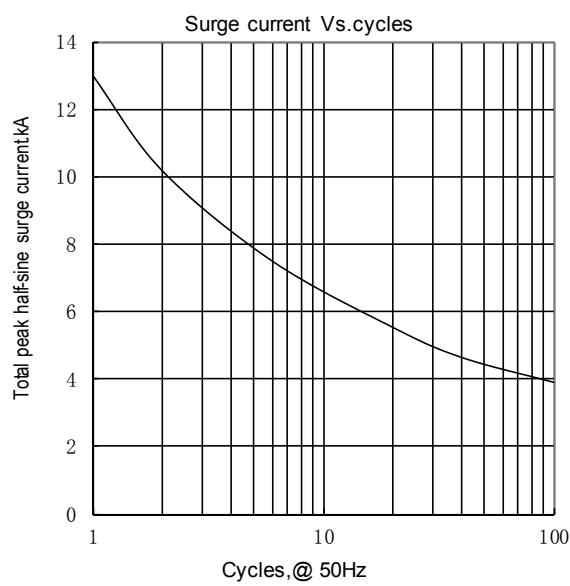


Fig.7

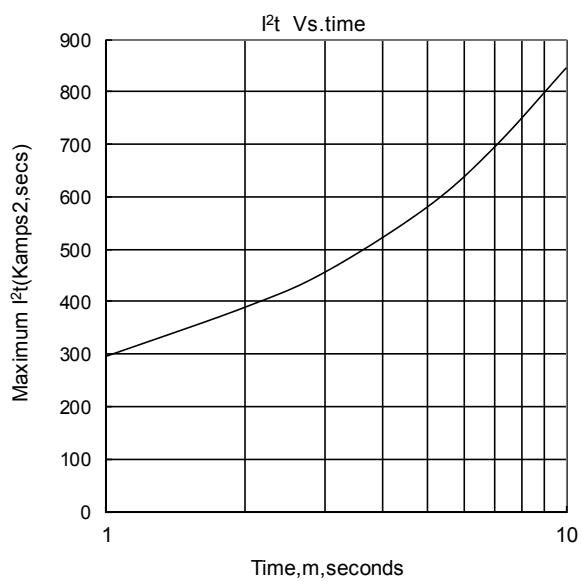


Fig.8

**Outline:**