

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

$I_{F(AV)}$	3000 A
V_{RRM}	1100~2000 V
I_{FSM}	27 kA
I^2t	3645 $10^3 A^2S$



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,	$T_C=55^{\circ}C$			3000	A
			$T_C=85^{\circ}C$			2490	
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			80	mA
I_{FSM}	Surge forward current	10ms half sine wave	175			27	kA
I^2t	I^2T for fusing coordination	$V_R = 0.6V_{RRM}$				3645	$A^2s \cdot 10^3$
V_{FO}	Threshold voltage		175			0.89	V
r_F	Forward slop resistance					0.15	m Ω
V_{FM}	Peak on-state voltage	$I_{FM} = 4500A, F = 24kN$	175			1.57	V
Q_{rr}	Recovery charge	$I_{FM} = 2000A, tp = 2000\mu s, di/dt = -20A/\mu s, V_R = 50V$	175		3500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 24kN				0.020	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.005	
F_m	Mounting force			19		26	kN
T_{stg}	Stored temperature			-40		175	$^{\circ}C$
W_t	Weight				440		g
Outline	ZT50cT						

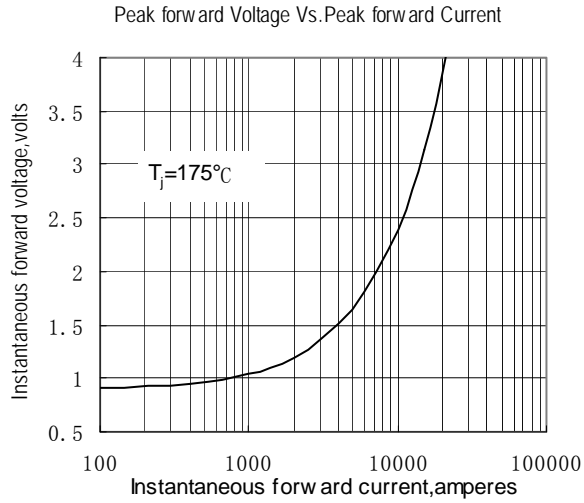


Fig.1

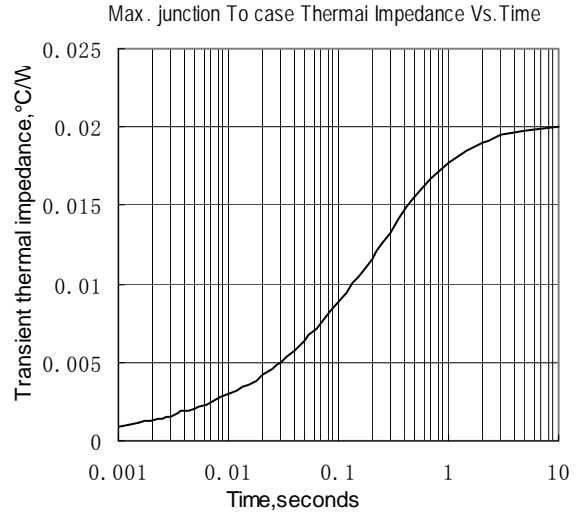


Fig.2

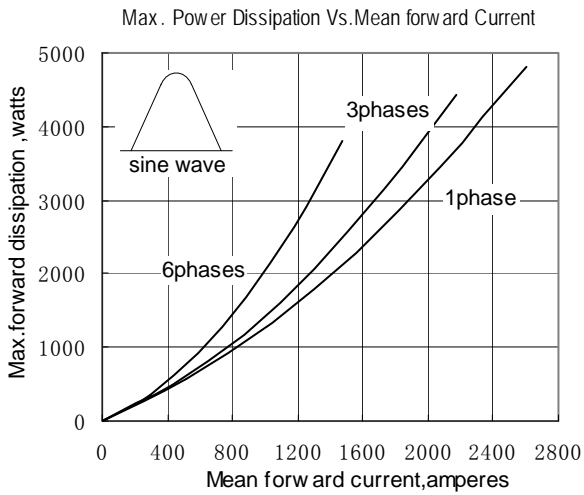


Fig.3

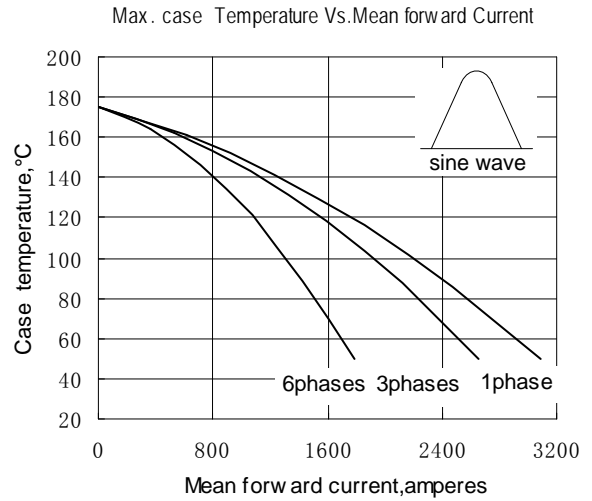


Fig.4

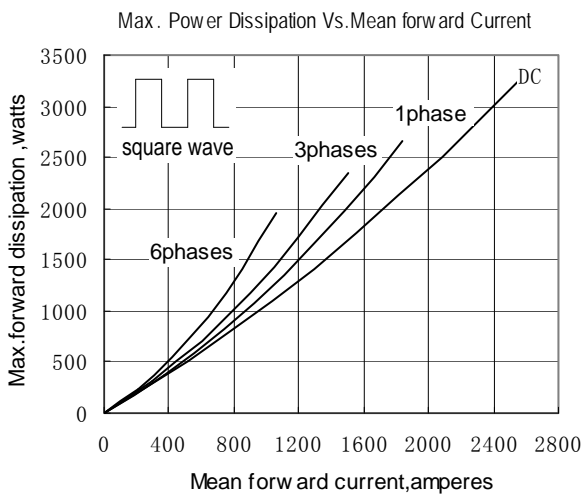


Fig.5

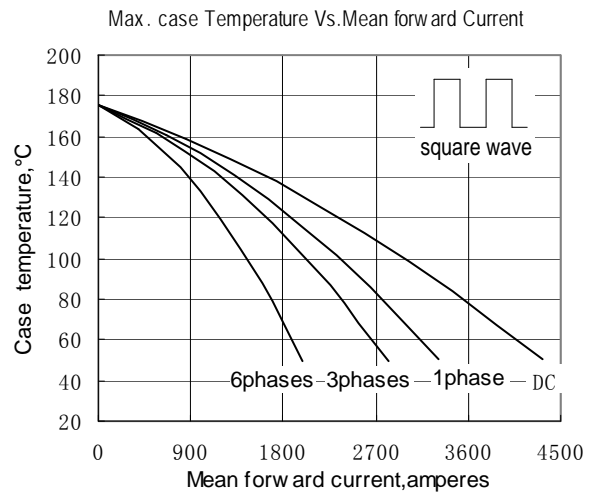


Fig.6

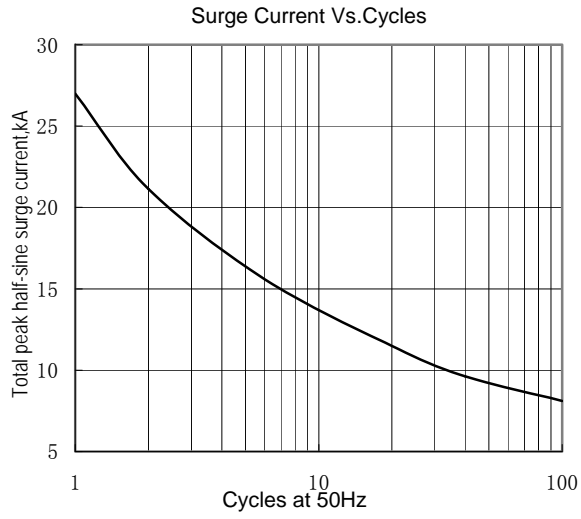


Fig.7

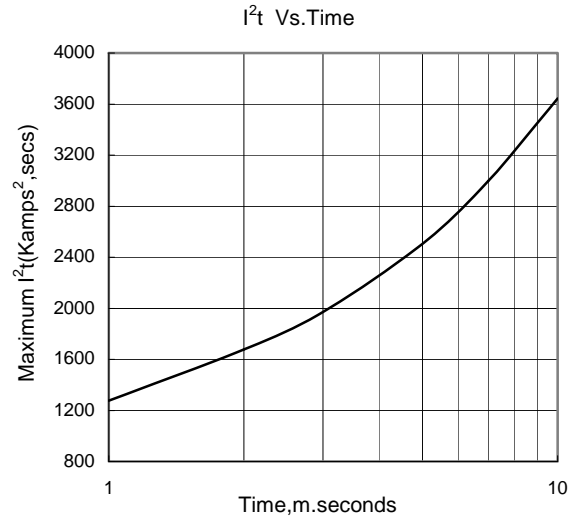


Fig.8

Outline:

