

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

$I_{F(AV)}$ **2300 A**
 V_{RRM} **2100~3000 V**
 I_{FSM} **23 kA**
 I^2t **2645 10³ A²S**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T _j (°C)	VALUE			UNIT
					Min	Type	Max	
I _{F(AV)}	Mean forward current	180° half sine wave 50Hz Double side cooled,	T _C =85°C	160			2300	A
V _{RRM}	Repetitive peak reverse voltage	tp=10ms		160	2100		3000	V
I _{RRM}	Repetitive peak current	At V _{RRM}		160			80	mA
I _{FSM}	Surge forward current	10ms half sine wave		160			23	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}					2645	A ² s*10 ³
V _{FO}	Threshold voltage			160			0.80	V
r _F	Forward slope resistance						0.16	mΩ
V _{FM}	Peak forward voltage	I _{FM} =4500A, F=24kN		160			1.52	V
Q _{rr}	Recovery charge	I _{FM} =2000A, tp=2000μs, di/dt=-20A/μs, V _R =50V		160		3500		μC
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 24kN					0.018	°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		160	°C
W _t	Weight					440		g
Outline								

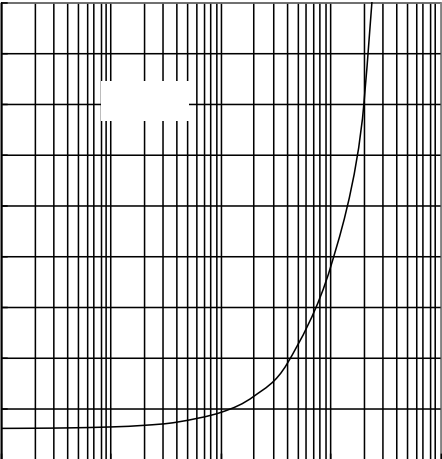


Fig.1

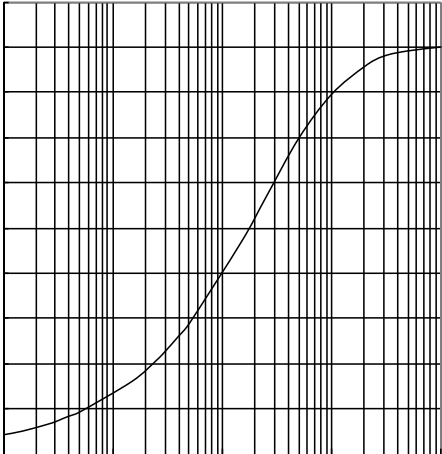


Fig.2

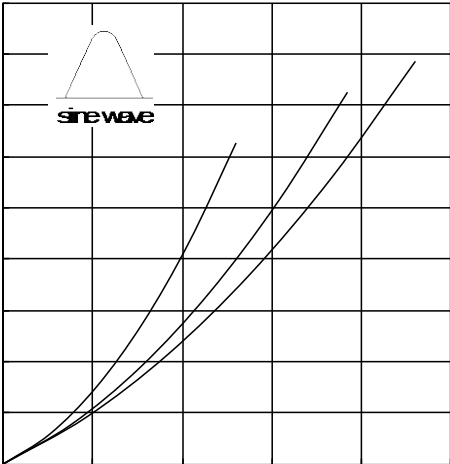


Fig.3

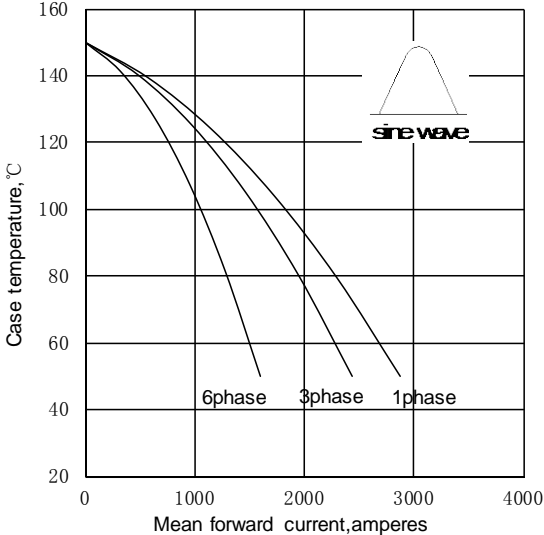


Fig.4

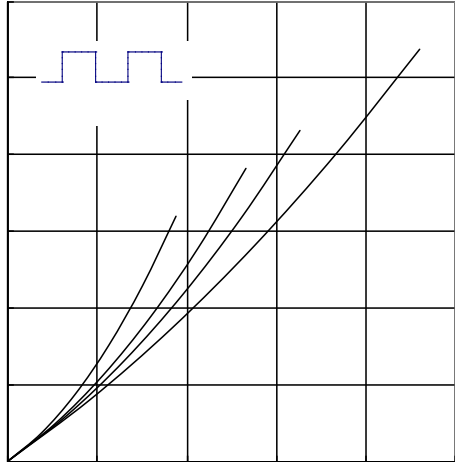


Fig.5

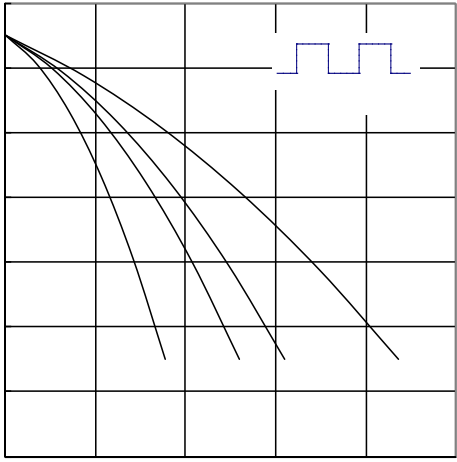


Fig.6

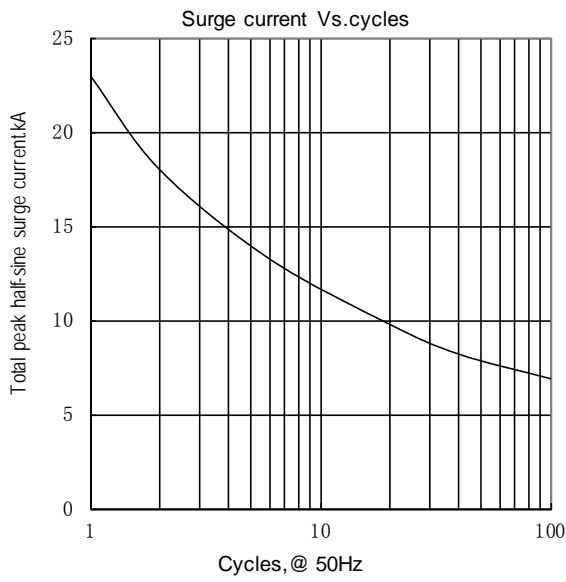


Fig.7

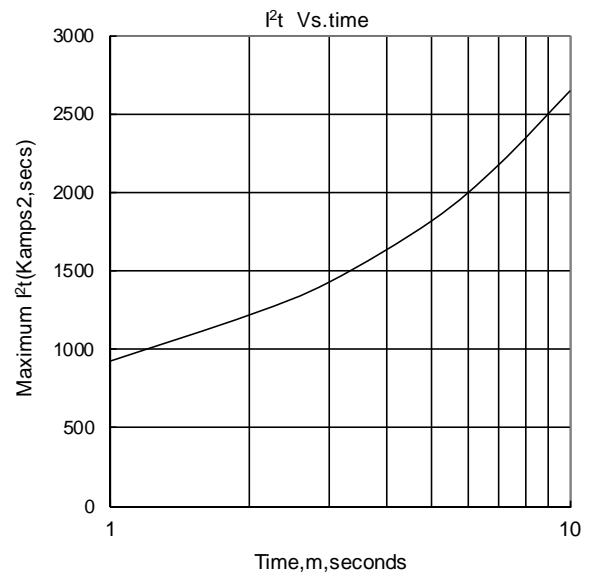


Fig.8

Outline: ZT50aT

