

**Features**

- Low forward voltage drop
- High reverse voltage
- Hermetic metal cases with ceramic insulators

**I<sub>F(AV)</sub>****1200A****V<sub>RRM</sub>****2100~3000 V****Typical Applications**

- All purpose high power rectifier diodes
- High power resistance welding equipment
- Non-controllable and half-controllable rectifiers
- Controlled rectifiers

**I<sub>FSM</sub>****12 kA****I<sup>2</sup>t****720 10<sup>3</sup>A<sup>2</sup>S**

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Double side cooled,	160			1200	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms	160	2100		3000	V
I <sub>RRM</sub>	Repetitive peak current	At V <sub>RRM</sub>	160			40	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave V <sub>R</sub> =0.6V <sub>RRM</sub>	160			12	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination					720	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		160			0.86	V
r <sub>F</sub>	Forward slope resistance					0.35	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =1500A, F=15kN	160			1.39	V
Q <sub>rr</sub>	Recovery charge	I <sub>FM</sub> =2000A, tp=2000μs, di/dt=-20A/μs, V <sub>R</sub> =50V	160		2000		μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 15.0kN				0.032	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink					0.010	
F <sub>m</sub>	Mounting force			10		20	kN
T <sub>stg</sub>	Stored temperature			-40		160	°C
W <sub>t</sub>	Weight				150		g
Outline							

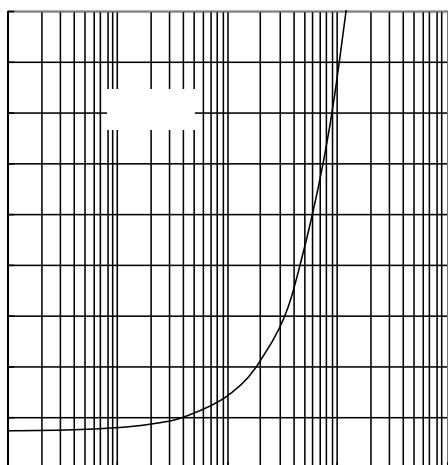


Fig.1

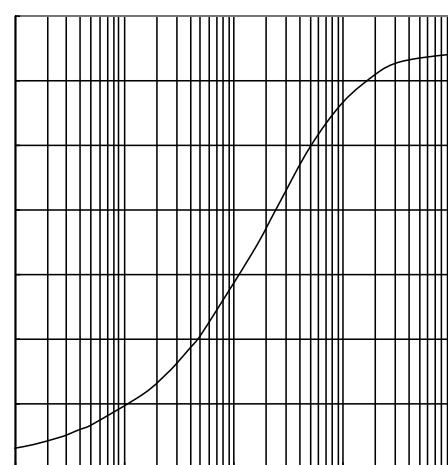


Fig.2

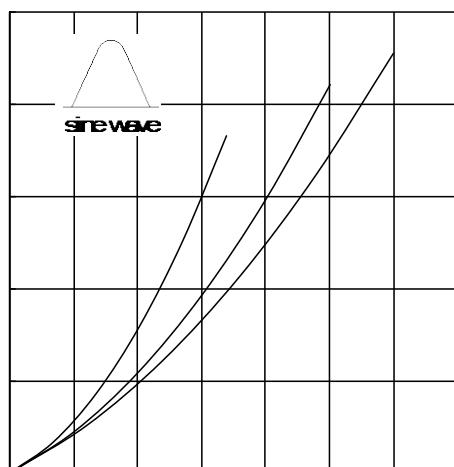


Fig.3

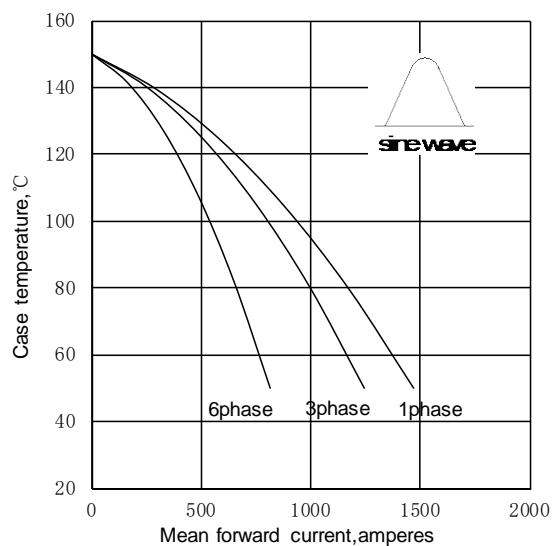


Fig.4

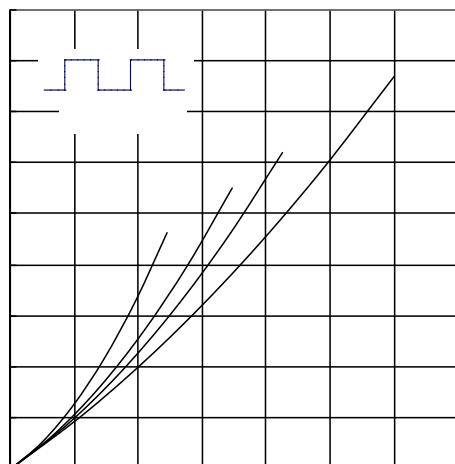


Fig.5

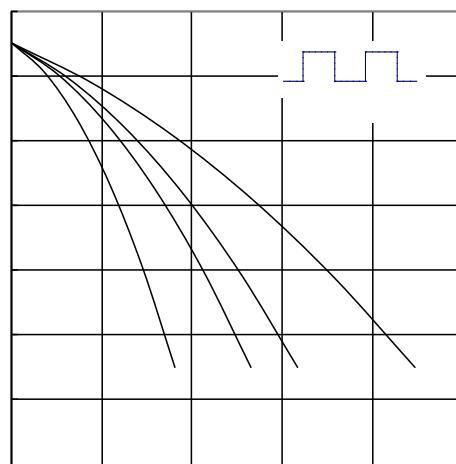


Fig.6

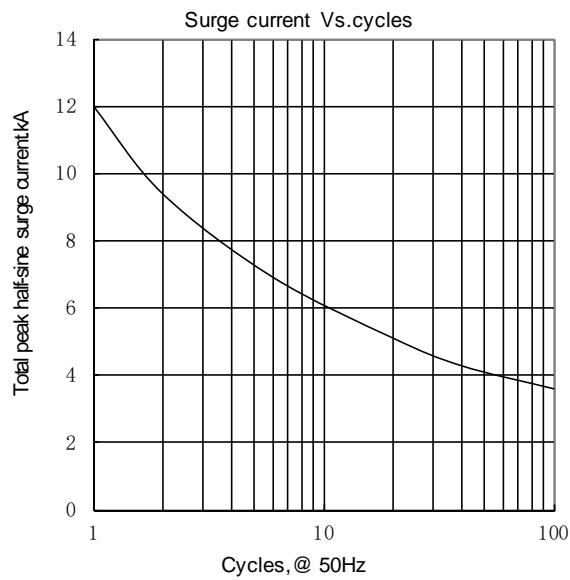


Fig.7

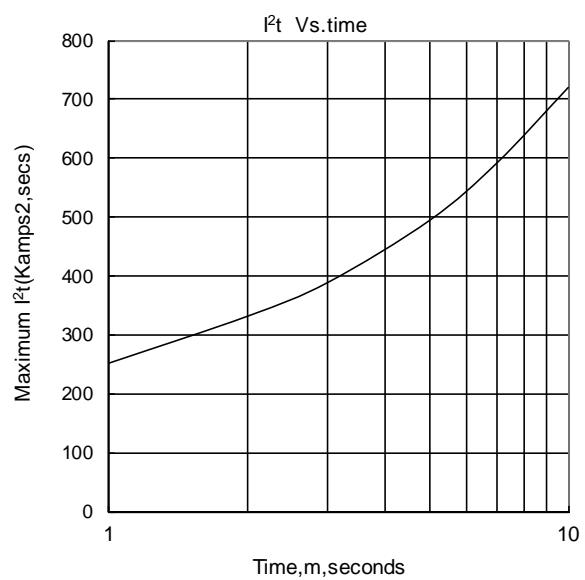


Fig.8

**Outline:** ZT33aT

