

**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

**Part No. Y38ZPG-ZT33cT**

<b>I<sub>F(AV)</sub></b>	<b>920A</b>	
<b>V<sub>R(RM)</sub></b>	<b>4500V</b>	<b>5000V</b>

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, T <sub>C</sub> =85°C	150			920	A
V <sub>R(RM)</sub>	Repetitive peak reverse voltage	tp=10ms	150	4300		5000	V
I <sub>R(RM)</sub>	Repetitive peak current	at V <sub>R(RM)</sub>	150			50	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave	150			8.6	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>R(RM)</sub>					369
V <sub>FO</sub>	Threshold voltage		150			0.99	V
r <sub>F</sub>	Forward slope resistance						0.45
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =1000A, F=20kN	25			2.00	V
Q <sub>rr</sub>	Recovery charge	I <sub>FM</sub> =1000A, tp=4000μs, di/dt=-20A/μs, V <sub>R</sub> =100V	150		2500		μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 15.0kN				0.035	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink					0.008	
F <sub>m</sub>	Mounting force			10		20	kN
T <sub>vj</sub>	Junction temperature			-40		150	°C
T <sub>stg</sub>	Stored temperature			-40		160	°C
W <sub>t</sub>	Weight				240		g
Outline	ZT33cT						

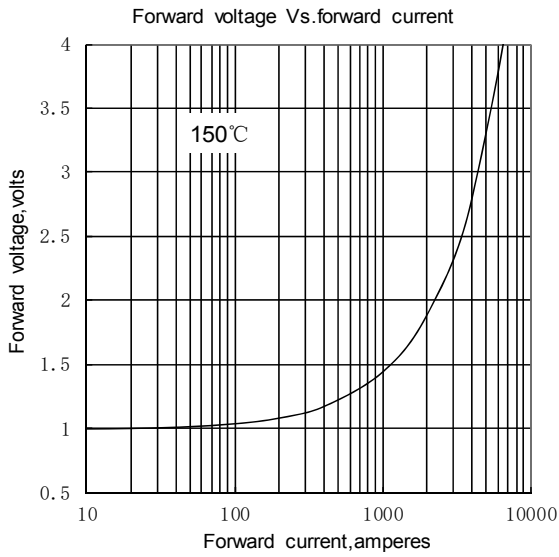


Fig.1

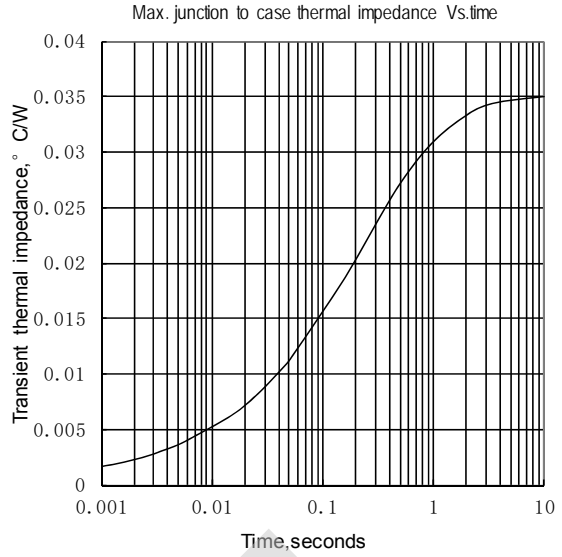


Fig.2

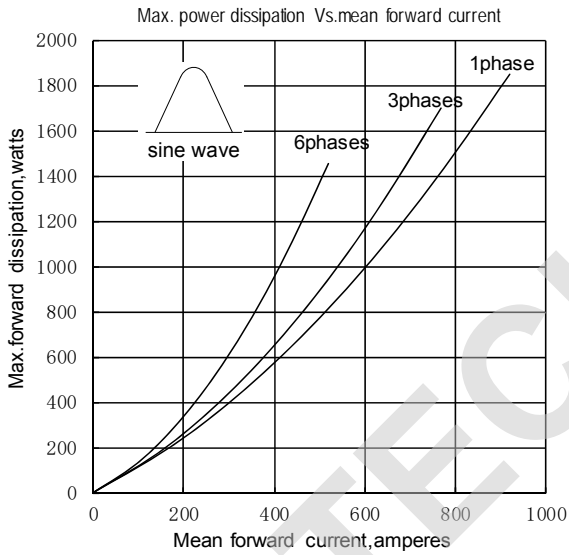


Fig.3

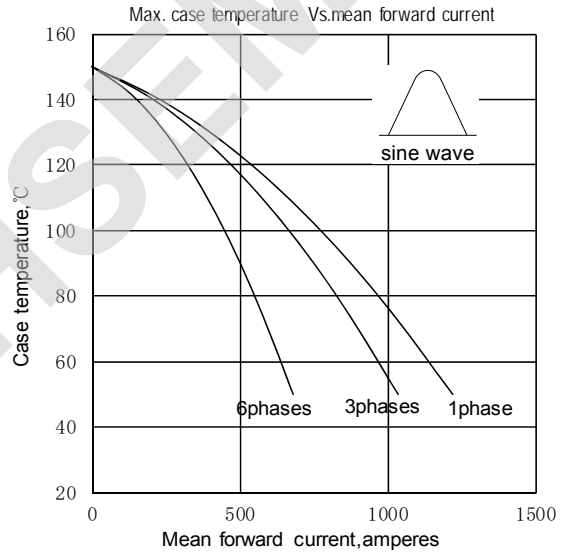


Fig.4

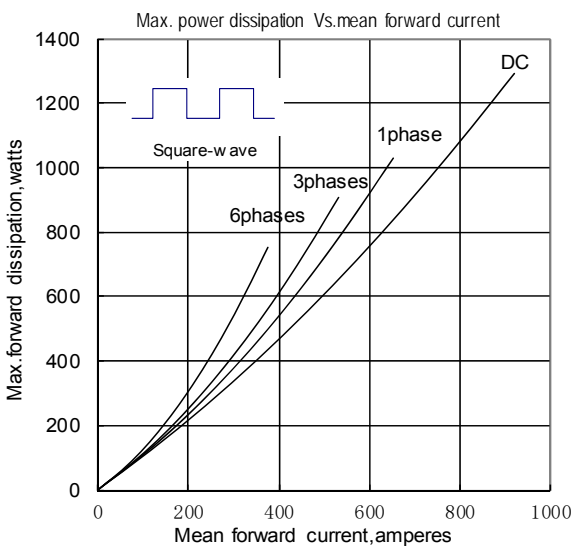


Fig.5

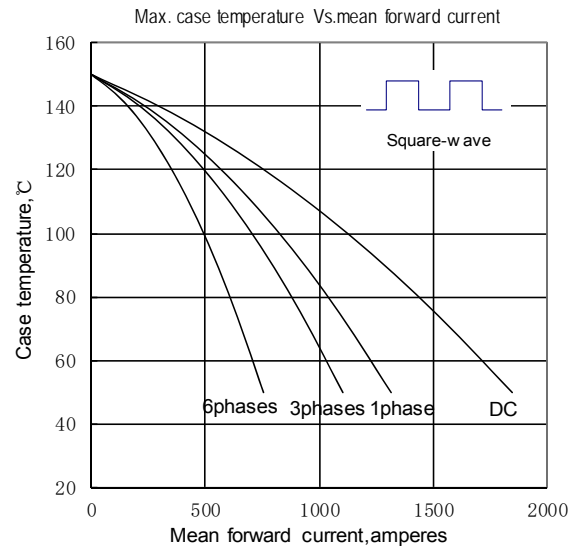


Fig.6

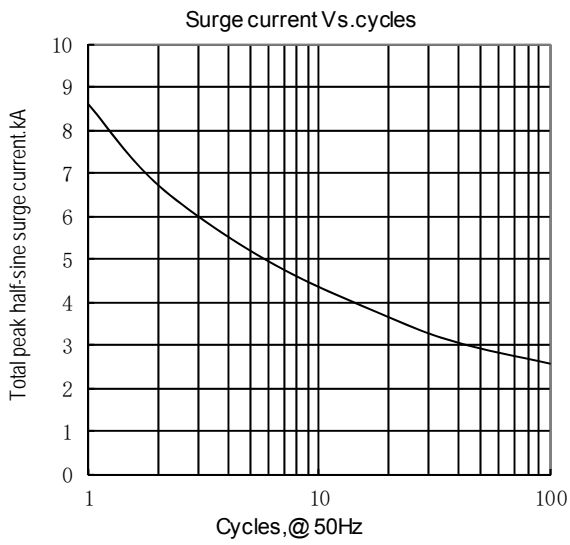


Fig7

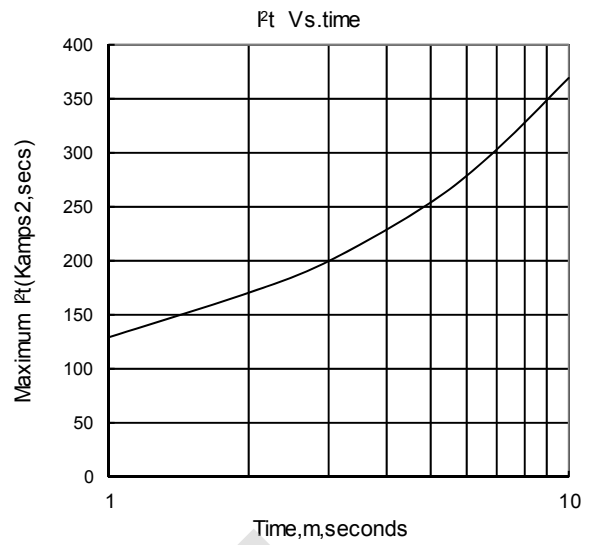
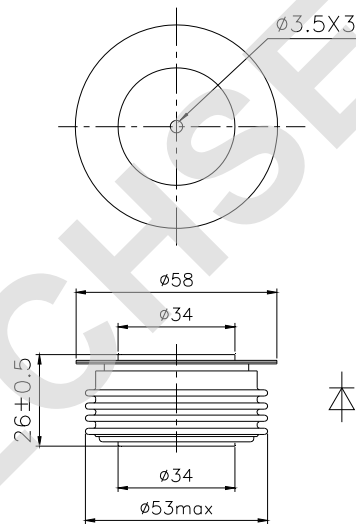


Fig8

Outline:



TECHSEM reserves the right to change specifications without notice.