

**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. H38ZPU-ZT33dT**

<b>I<sub>F(AV)</sub></b>	<b>400 A</b>
<b>V<sub>RRM</sub></b>	<b>8100V 8300V 8500 V</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		400	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms		150	8000	8500	V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub> tp=10ms		150		50	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave.		150		6.0	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				180	10 <sup>3</sup> A <sup>2</sup> s
V <sub>FO</sub>	Threshold voltage			150		1.40	V
r <sub>F</sub>	Forward slope resistance					2.20	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =1000A, F=24kN		25		2.55	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	double side cooled Clamping force 15kN				0.045	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heatsink					0.008	
F <sub>m</sub>	Mounting force				10	20	kN
T <sub>vj</sub>	Junction temperature				-40	150	°C
T <sub>sig</sub>	Stored temperature				-40	160	°C
W <sub>t</sub>	Weight					300	g
Outline	ZT33dT						

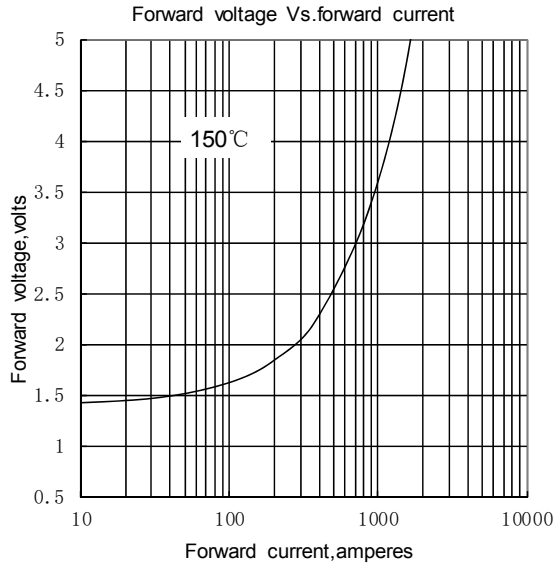


Fig.1

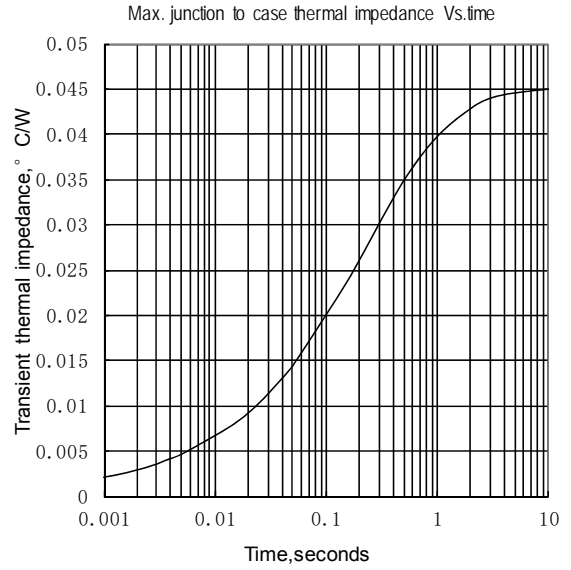


Fig.2

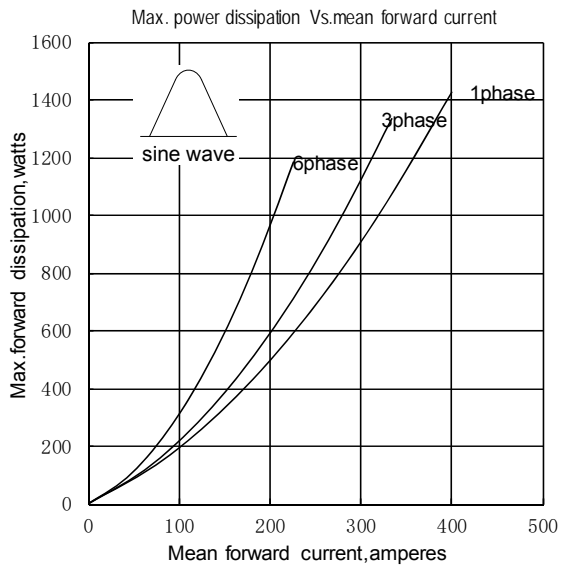


Fig.3

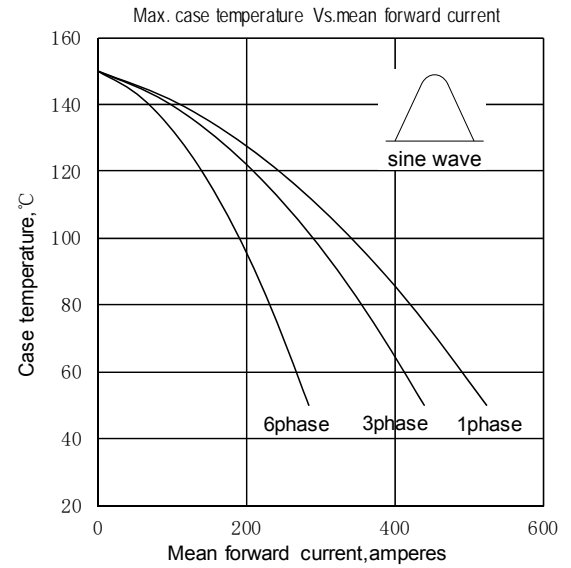


Fig.4

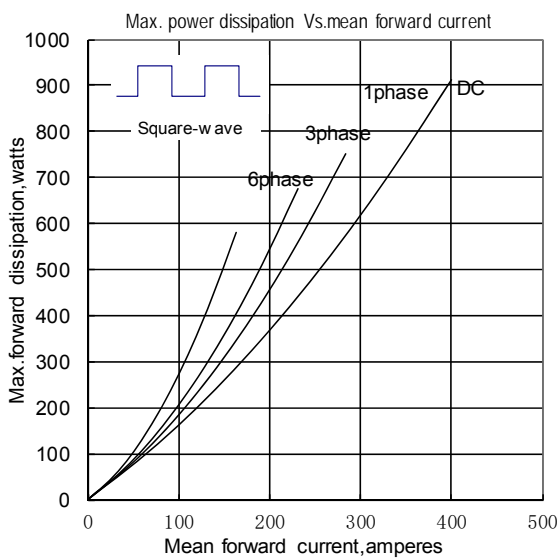


Fig.5

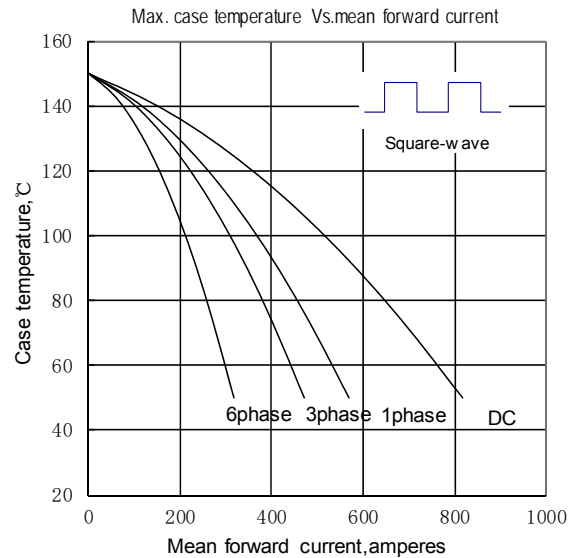


Fig.6

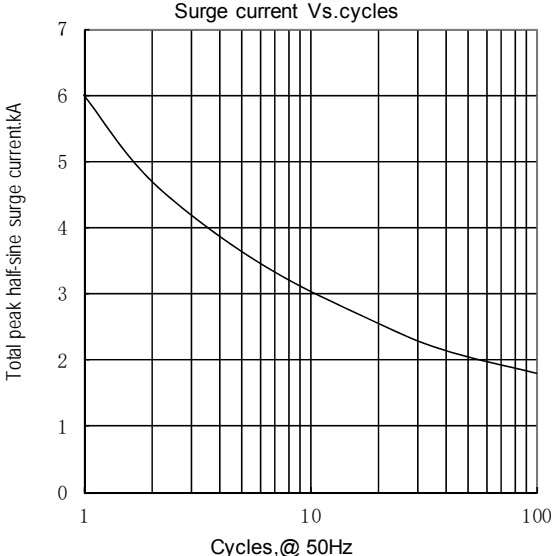


Fig.7

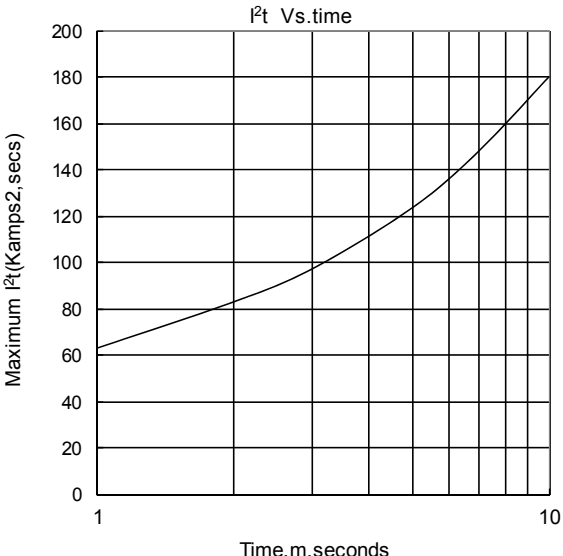
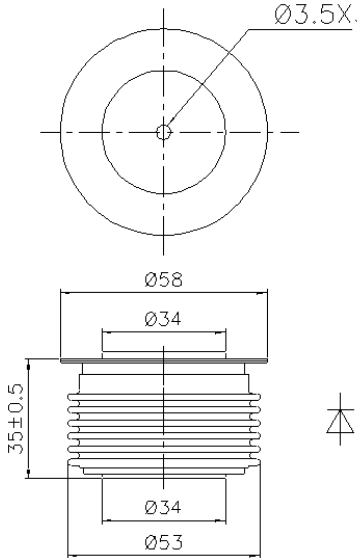


Fig.8

Outline:



TECHSEM reserves the right to change specifications without notice.