



**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

**Part No. Y89ZPG-ZT84cT**

**I<sub>F(AV)</sub> 4500A**  
**V<sub>RRM</sub> 4500V 5000V**

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			4500	A
			T <sub>C</sub> =100°C				3800	
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms	150	4300		5000	V	
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	150			300	mA	
I <sub>FSM</sub>	Surge forward current	10ms half sine wave V <sub>R</sub> =0.6V <sub>RRM</sub>	150			46	kA	
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination					10580	10 <sup>3</sup> A <sup>2</sup> s	
V <sub>FO</sub>	Threshold voltage		150			0.91	V	
r <sub>F</sub>	Forward slope resistance					0.10	mΩ	
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =5000A, F=70kN	25			1.65	V	
Q <sub>rr</sub>	Recovery charge	I <sub>FM</sub> =2000A, tp=4000μs, di/dt=-20A/μs, V <sub>R</sub> =100V	150		9000		μC	
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 70kN				0.007	°C /W	
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink					0.002		
F <sub>m</sub>	Mounting force			63		84	kN	
T <sub>vj</sub>	Junction temperature			-40		150	°C	
T <sub>stg</sub>	Stored temperature			-40		160	°C	
W <sub>t</sub>	Weight					1390	g	
Outline	ZT84cT							

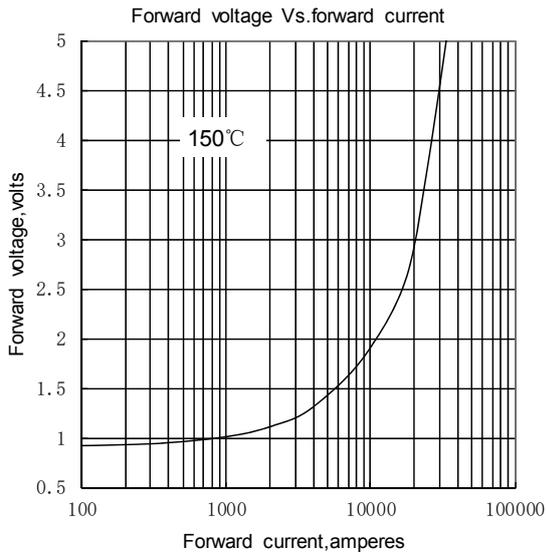


Fig.1

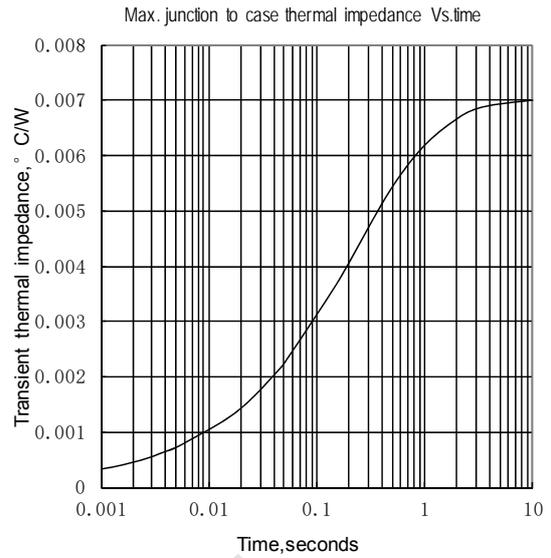


Fig.2

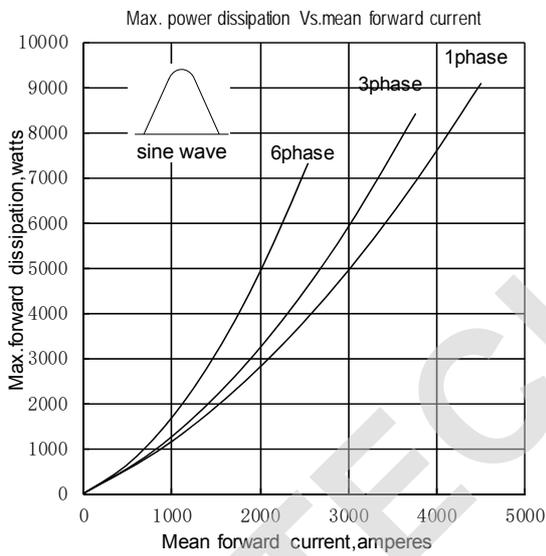


Fig.3

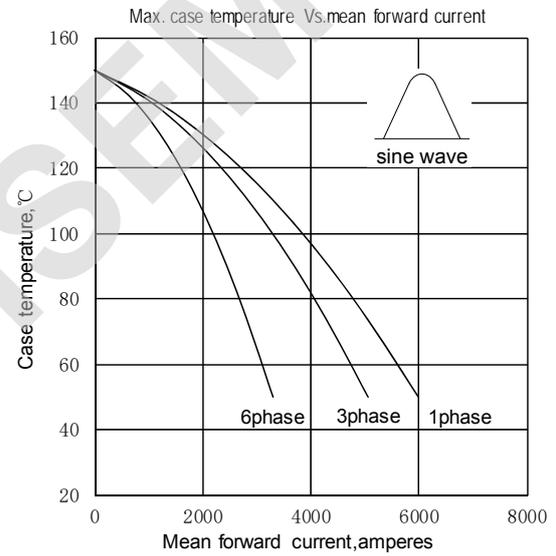


Fig.4

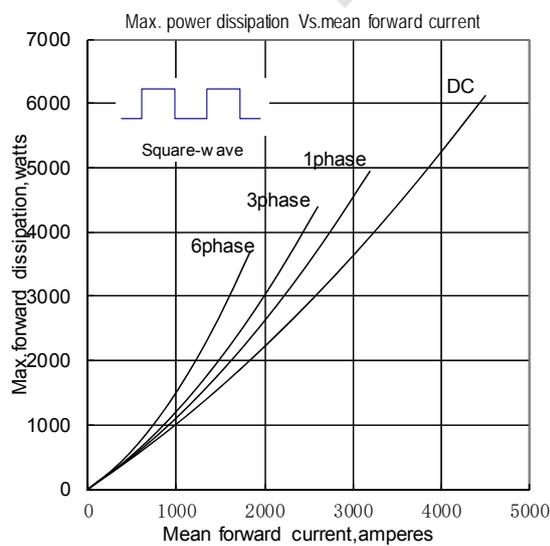


Fig.5

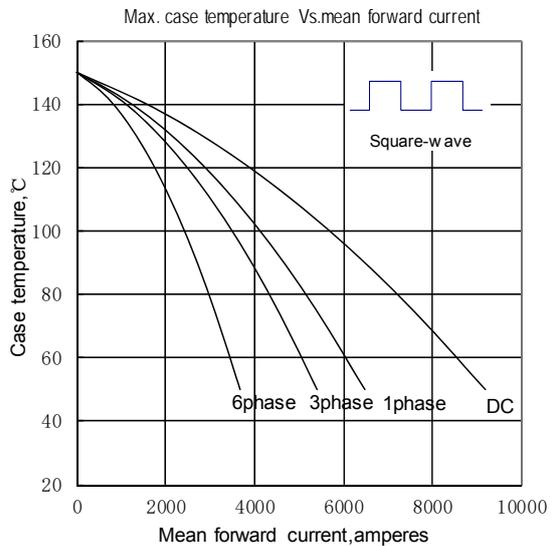


Fig.6

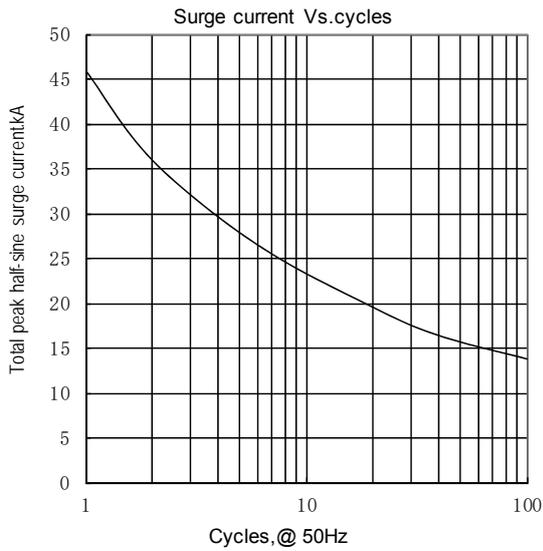


Fig.7

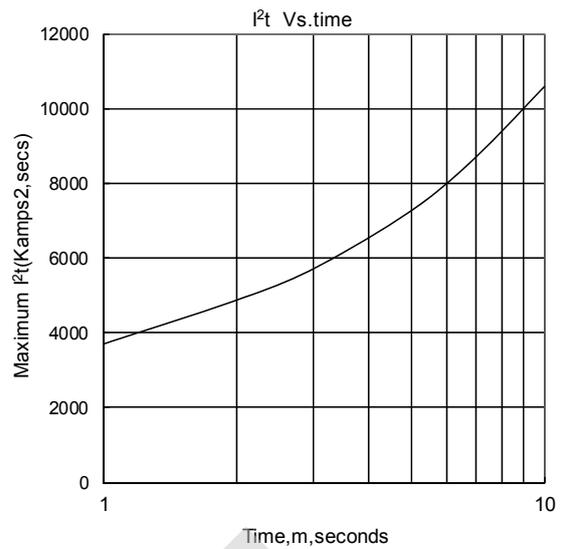
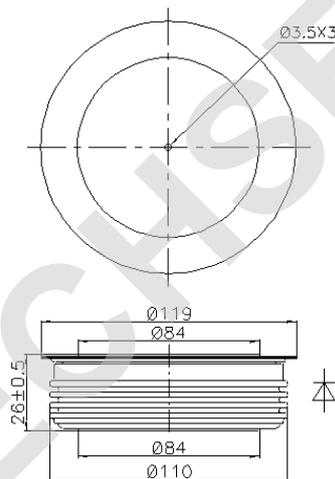


Fig.8

Outline:



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