



**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

<b>Part No. Y40ZPC-ZT39cT</b>			
<b>I<sub>F(AV)</sub></b>	<b>1790A</b>		
<b>V<sub>RRM</sub></b>	<b>1200V</b>	<b>1400V</b>	
	<b>1600V</b>	<b>1800V</b>	
	<b>2000V</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	175			1790	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms		175	1100		2000	V
I <sub>RRM</sub>	Repetitive peak current	V <sub>RM</sub> = V <sub>RRM</sub>		175			50	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave		175			18	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>						1620
V <sub>FO</sub>	Threshold voltage			175			0.90	V
r <sub>F</sub>	Forward slope resistance							0.204
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =3000A, F=18kN		25			2.0	V
Q <sub>rr</sub>	Recovery charge	I <sub>FM</sub> =1000A, tp=4000μs, di/dt=-20A/μs, V <sub>R</sub> =100V		175		1900		μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 18.0kN					0.028	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink						0.0075	
F <sub>m</sub>	Mounting force				15		20	kN
T <sub>vj</sub>	Junction temperature				-40		175	°C
T <sub>stg</sub>	Stored temperature				-40		175	°C
W <sub>t</sub>	Weight					320		g
Outline	ZT39cT40							

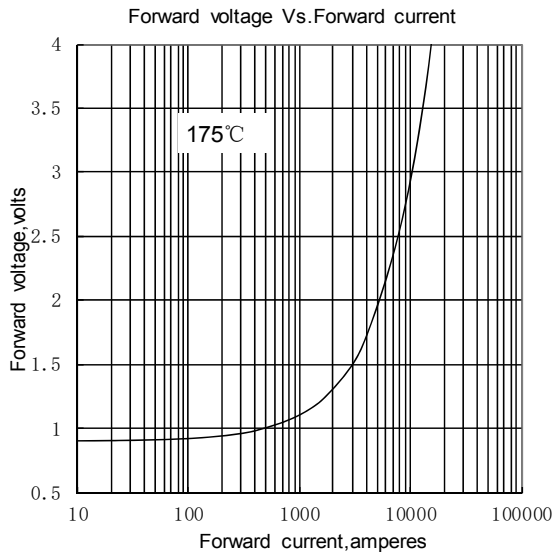


Fig.1

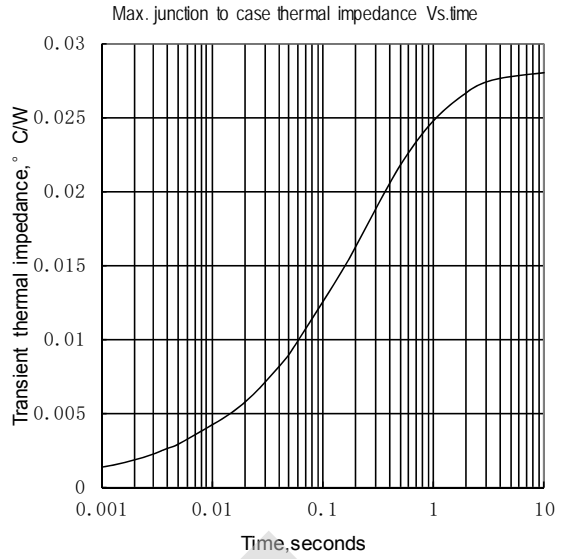


Fig.2

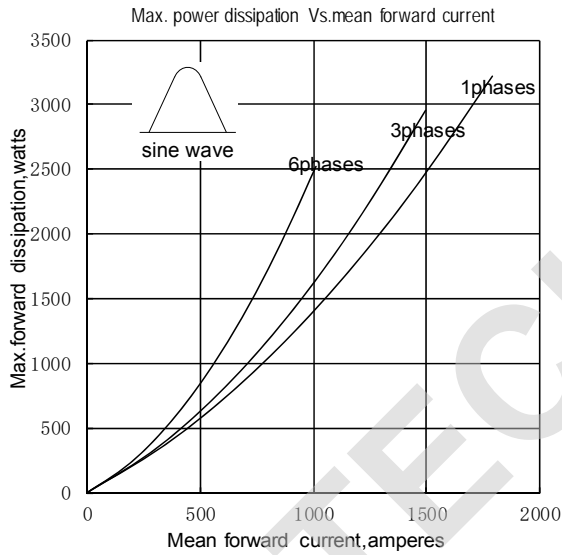


Fig.3

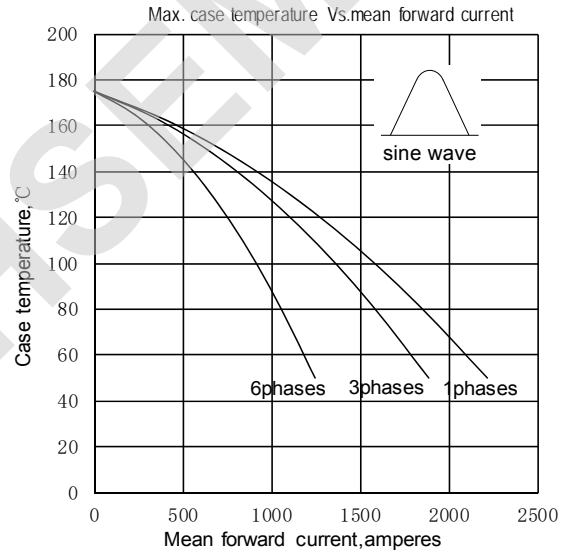


Fig.4

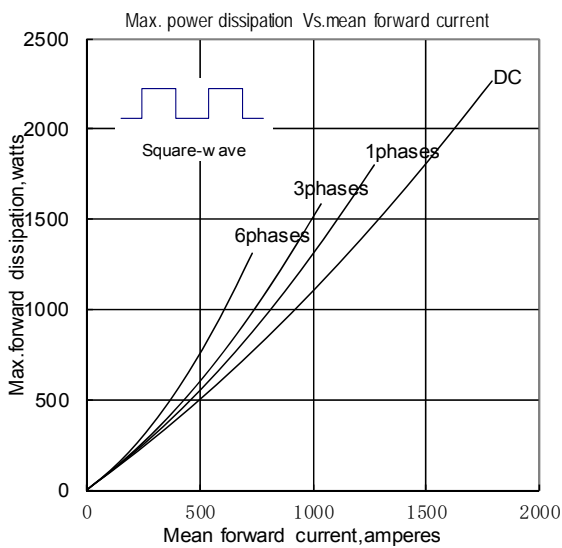


Fig.5

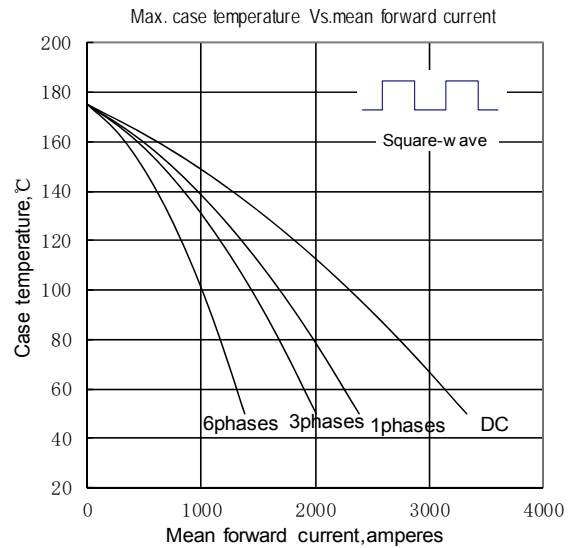


Fig.6

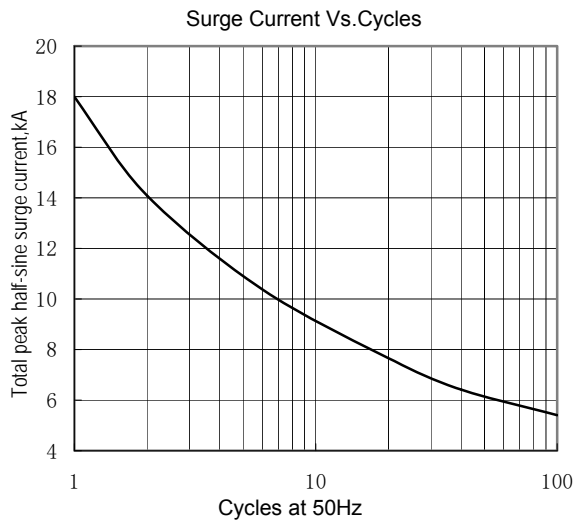


Fig.7

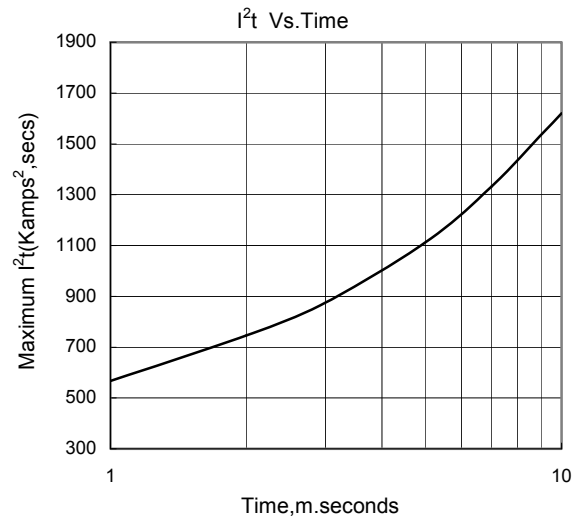
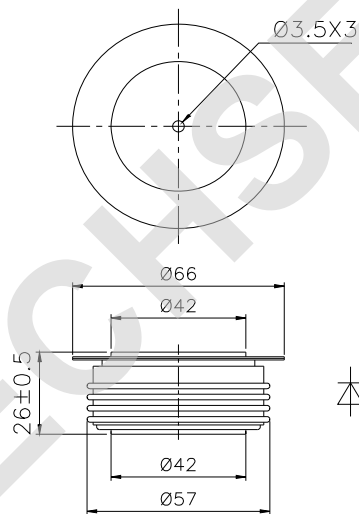


Fig.8

Outline:



TECHSEM reserves the right to change specifications without notice.