**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. Y50ZPD-ZT50cT**

<b>I<sub>F(AV)</sub></b>	<b>1980A</b>	
<b>V<sub>RRM</sub></b>	<b>2200V</b>	<b>2500V</b>
	<b>2800V</b>	<b>3000V</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	160			1980	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			80	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave	160			27	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				3645	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		160			0.82	V
r <sub>F</sub>	Forward slope resistance					0.22	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =3000A, F=24kHz	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	160		3500		μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 24kN				0.020	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink					0.005	
F <sub>m</sub>	Mounting force			19		26	kN
T <sub>vj</sub>	Junction temperature			-40		160	°C
T <sub>stg</sub>	Stored temperature			-40		160	°C
W <sub>t</sub>	Weight					440	g
Outline	ZT50cT						

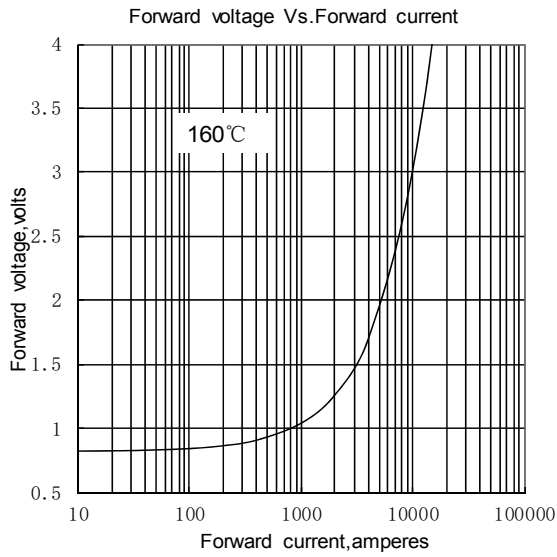


Fig.1

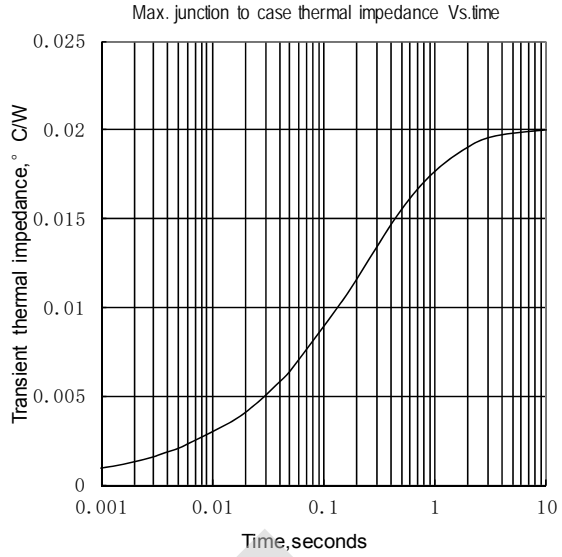


Fig.2

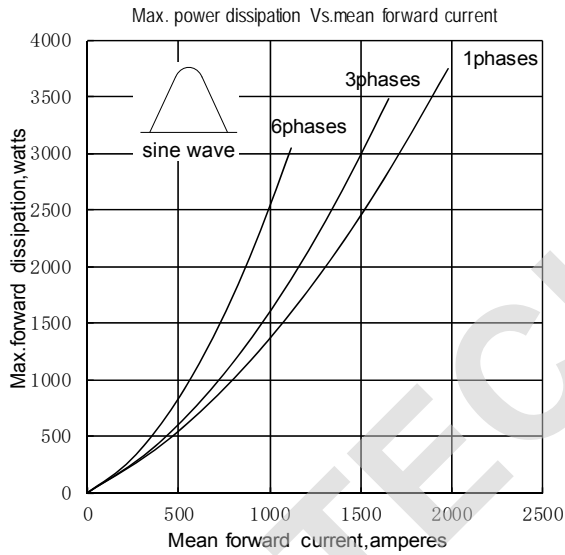


Fig.3

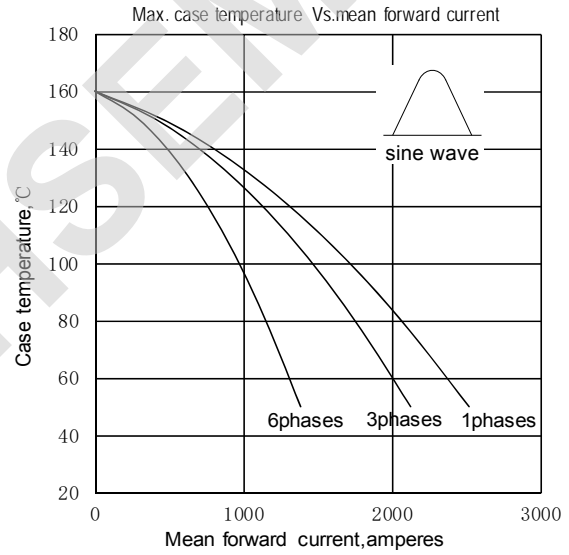


Fig.4

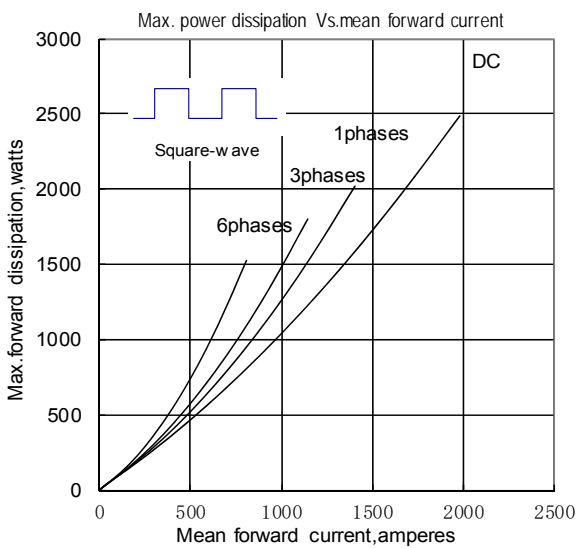


Fig.5

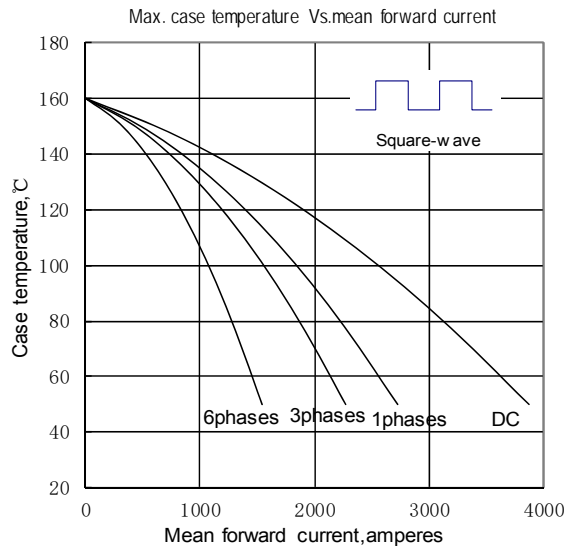


Fig.6

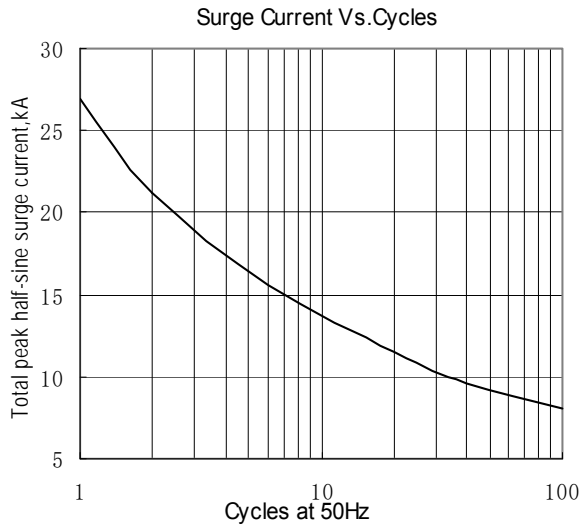


Fig.7

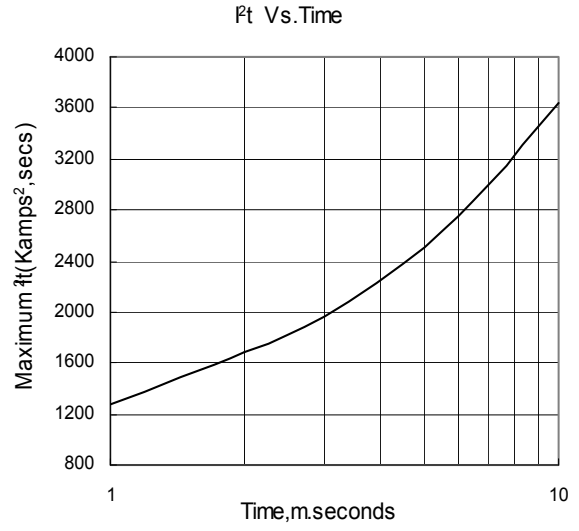
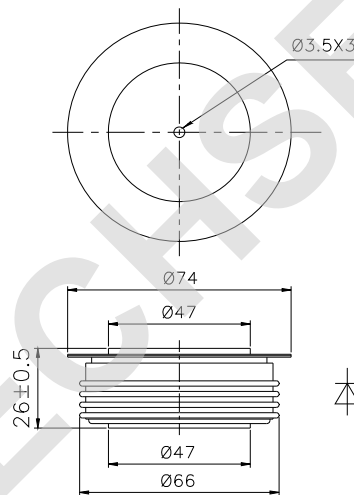


Fig.8

Outline:



TECHSEM reserves the right to change specifications without notice.