

**Features:**

- n Low forward voltage drop
- n High reverse voltage
- n Hermetic metal cases with ceramic insulators

**Typical Applications**

- n All purpose high power rectifier diodes
- n High power resistance welding equipment
- n Non-controllable and half-controllable rectifiers
- n Controlled rectifiers

**Part No. Y70ZPE-ZT60cT**

<b>I<sub>F(AV)</sub></b>	<b>3090A</b>	
<b>V<sub>RRM</sub></b>	<b>3200V</b>	<b>3500V</b>
	<b>4000V</b>	<b>4200V</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			3090	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms		160	3100		4200	V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>		160			160	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave		160			35	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>					6125	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage			160			0.88	V
r <sub>F</sub>	Forward slope resistance						0.15	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =3000A, F=35kN		25			1.63	V
Q <sub>rr</sub>	Recovery charge	I <sub>FM</sub> =2000A, tp=4000μs, di/dt=-20A/μs, V <sub>R</sub> =100V		160		5700		μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 35kN					0.012	°C/W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink						0.003	
F <sub>m</sub>	Mounting force				30		40	kN
T <sub>vj</sub>	Junction temperature				-40		160	°C
T <sub>stg</sub>	Stored temperature				-40		160	°C
W <sub>t</sub>	Weight					880		g
Outline	ZT60cT							

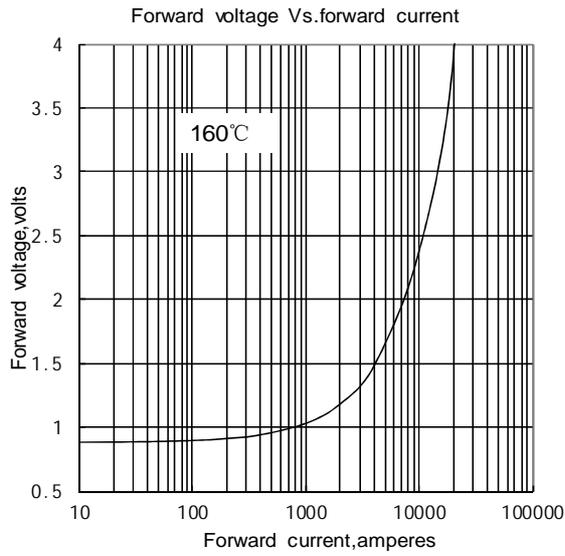


Fig.1

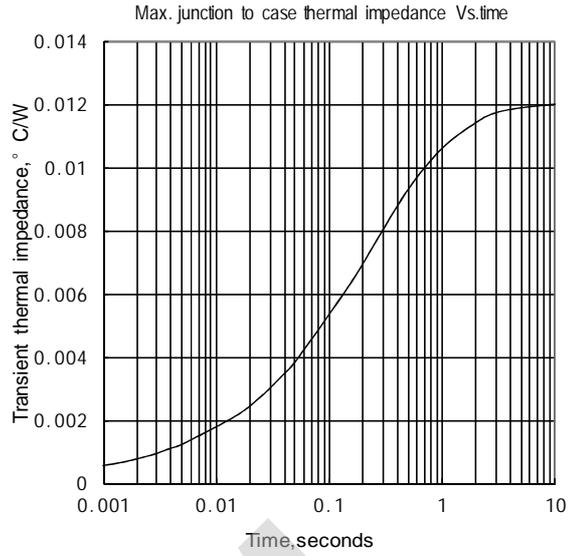


Fig.2

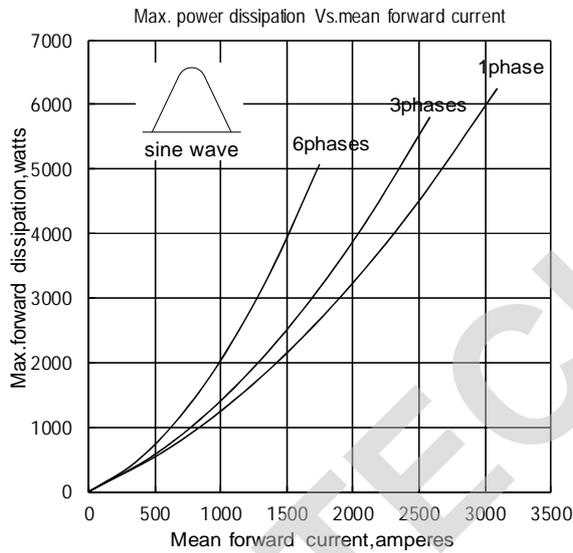


Fig.3

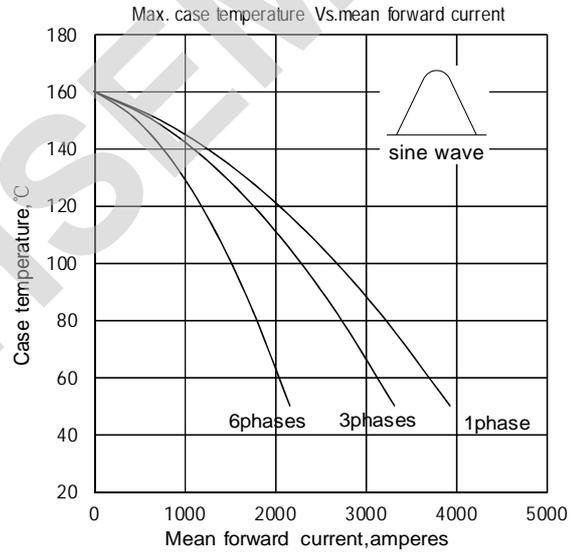


Fig.4

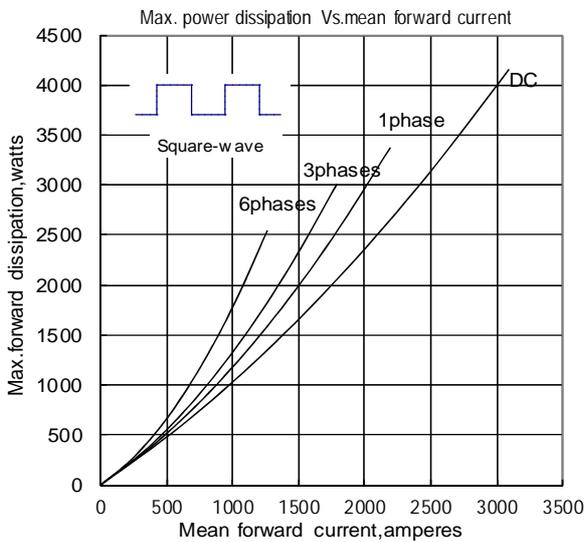


Fig.5

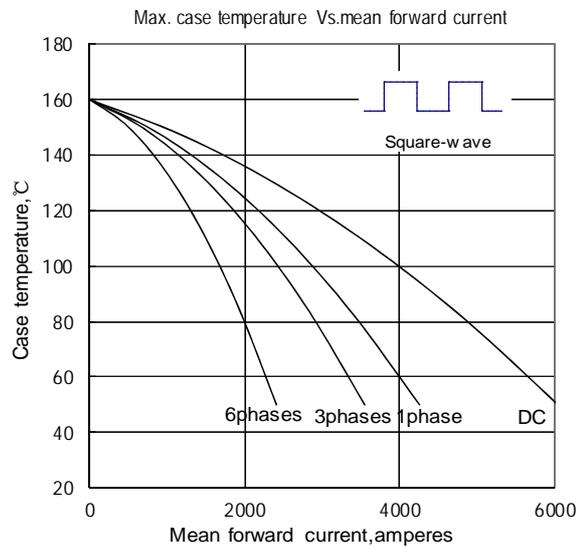


Fig.6

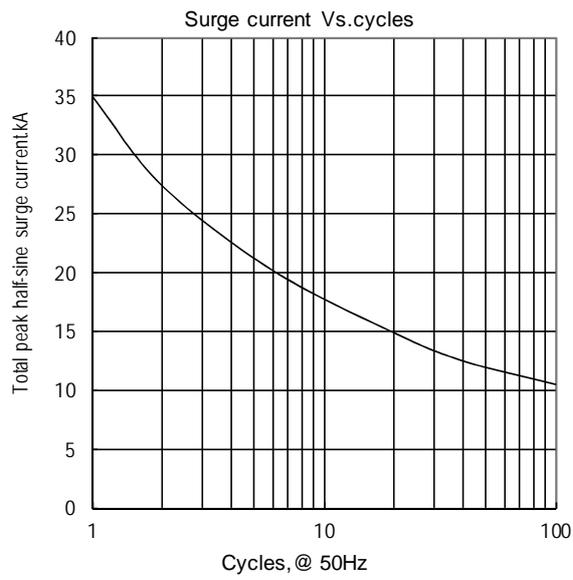


Fig.7

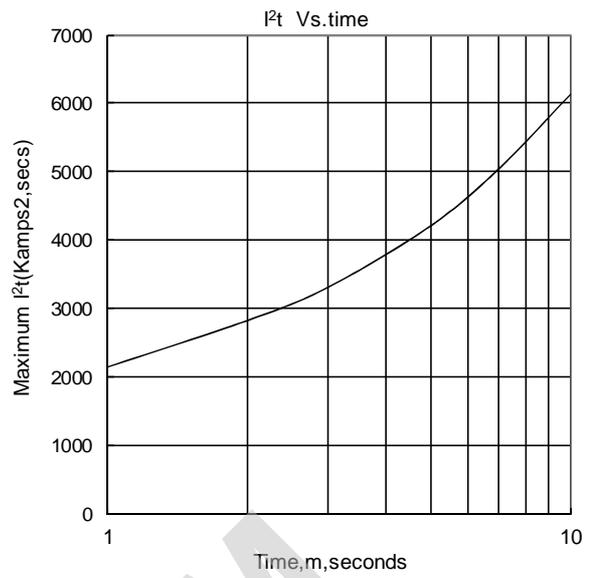
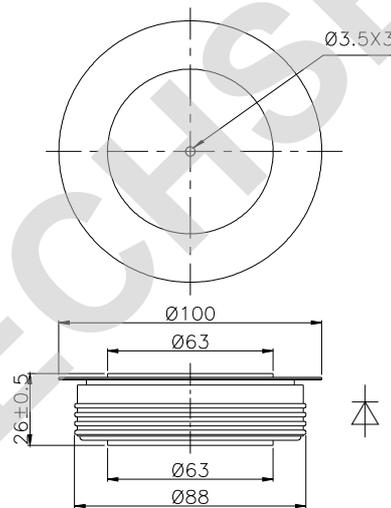


Fig.8

Outline:



TECHSEM reserves the right to change specifications without notice.