

**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. Y24ZPC-ZT19aT			
I <sub>F(AV)</sub>	560A	V <sub>RRM</sub>	1200V 1400V
			1600V 1800V
			2000V

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,	175			560	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	tp=10ms	175	1100		2000	V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	175			16	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave	175			5	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				125	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		175			0.8	V
r <sub>F</sub>	Forward slope resistance					0.86	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =600A, F=5kN	25			1.80	V
Q <sub>rr</sub>	Recovery charge	I <sub>FM</sub> =1000A, tp=4000μs, di/dt=-20A/μs, V <sub>R</sub> =100V	175		1400		μC
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled				0.080	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink	Clamping force 5.0kN				0.020	
F <sub>m</sub>	Mounting force			3.3		5.5	kN
T <sub>vj</sub>	Junction temperature			-40		175	°C
T <sub>stg</sub>	Stored temperature			-40		175	°C
W <sub>t</sub>	Weight				60		g
Outline	ZT19aT						

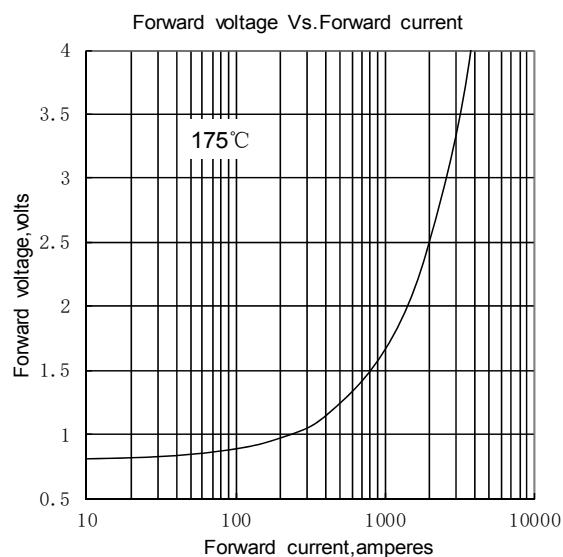


Fig.1

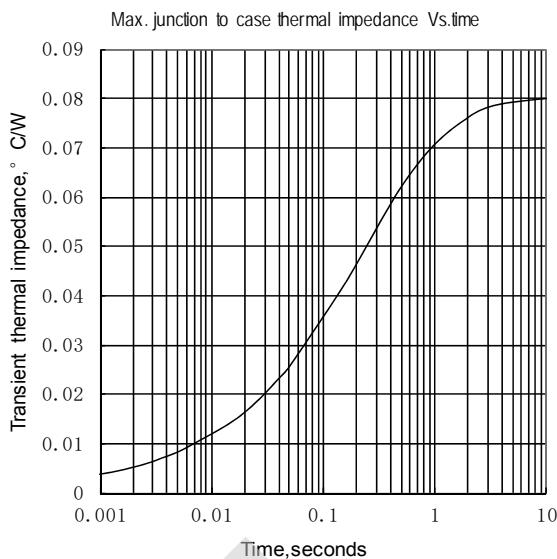


Fig.2

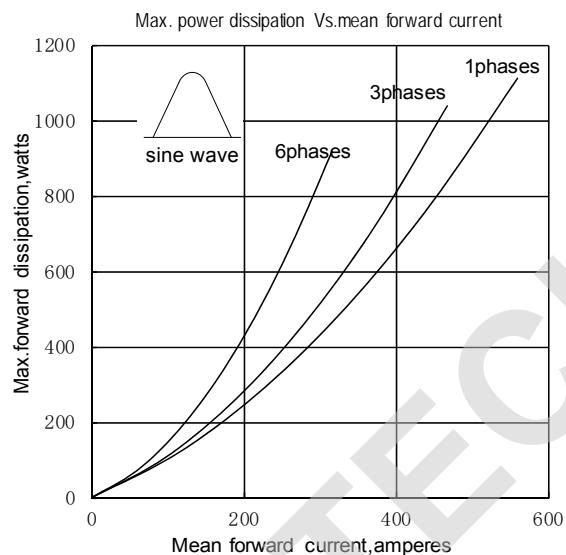


Fig.3

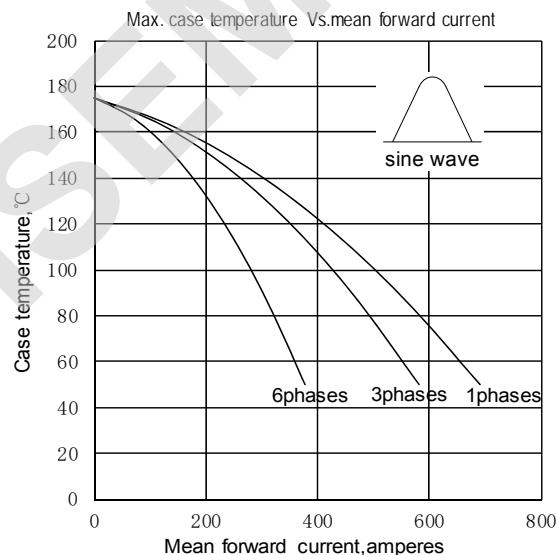


Fig.4

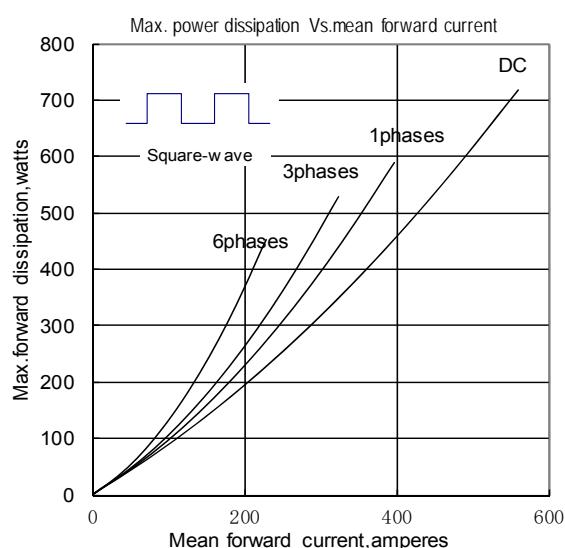


Fig.5

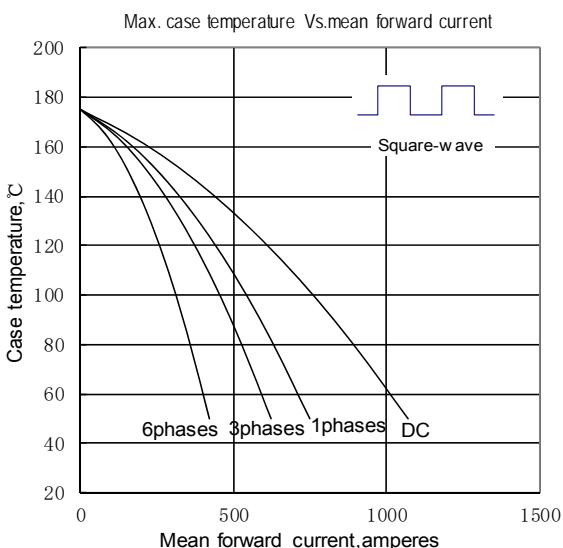


Fig.6

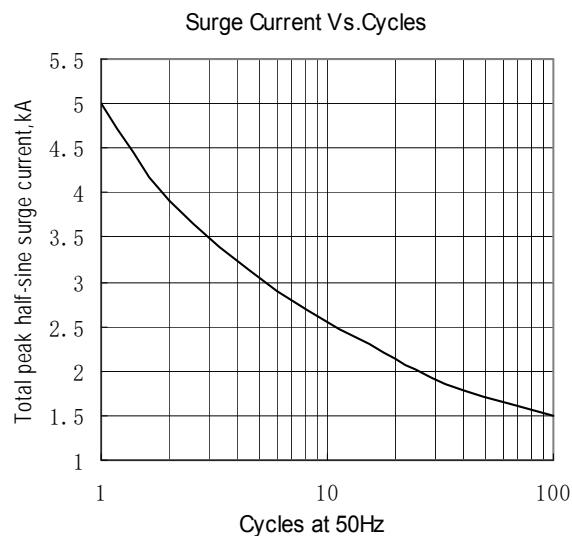


Fig.7

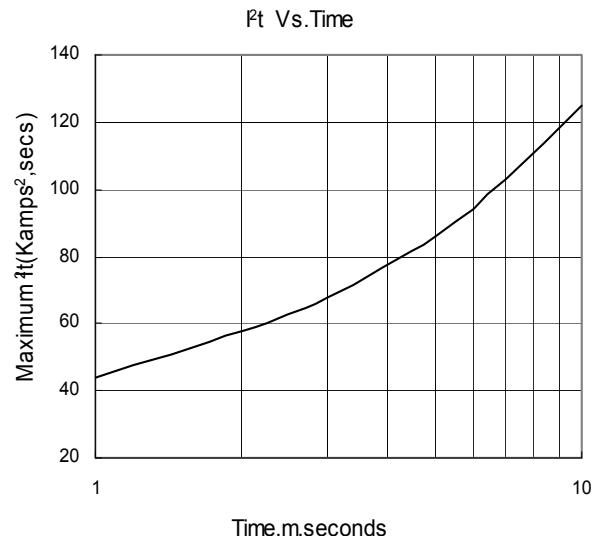
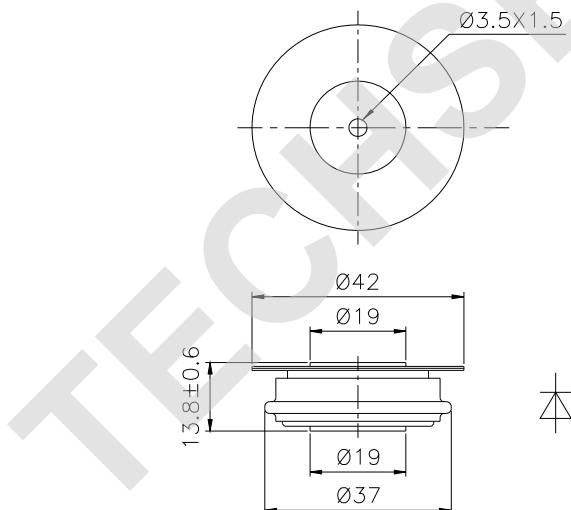


Fig.8

**Outline:**

TECHSEM reserves the right to change specifications without notice.