

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. Y50ZPE-ZT50cT		
$I_{F(AV)}$	**1770A**	
V_{RRM}	**3200V**	**3500V**
	4000V	**4200V**

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T_j(°C)	VALUE			UNIT
					Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,	T_C=85°C	160			1770	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms		160	3100		4200	V
I_{RRM}	Repetitive peak current	at V_{RRM}		160			80	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}		160			18	kA
I^2t	I^2t for fusing coordination						1620	A^2s*10^3
V_{FO}	Threshold voltage			160			0.98	V
r_F	Forward slope resistance						0.26	mΩ
V_{FM}	Peak forward voltage	I_{FM}=2400A, F=24kN		25			2.0	V
Q_{rr}	Recovery charge	I_{FM}=1000A, tp=4000μs, di/dt=-20A/μs, V_R=100V		160		3500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 24kN					0.020	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.005	
F_m	Mounting force				19		26	kN
T_{vj}	Junction temperature				-40		160	°C
T_{stg}	Stored temperature				-40		160	°C
W_t	Weight					440		g
Outline	ZT50cT							

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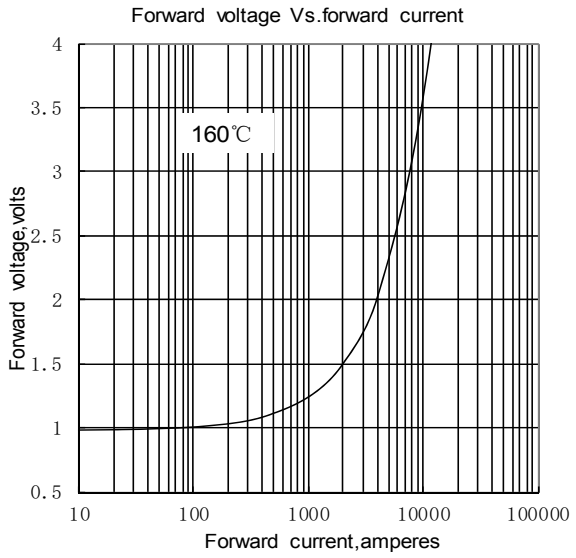


Fig.1

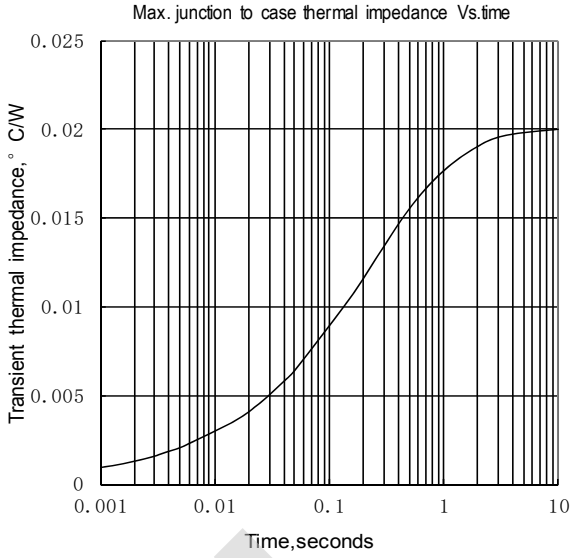


Fig.2

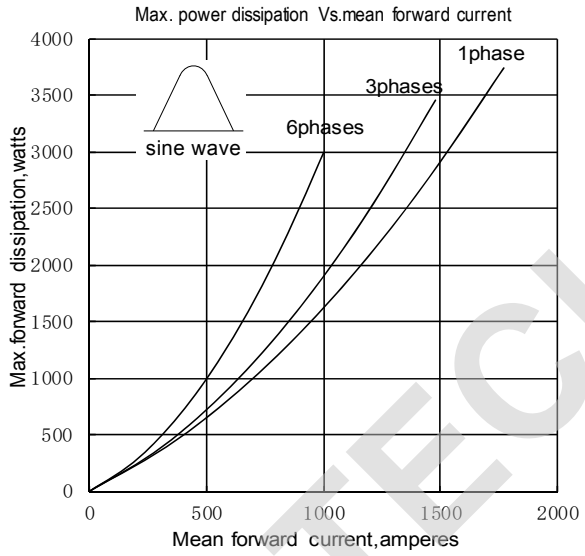


Fig.3

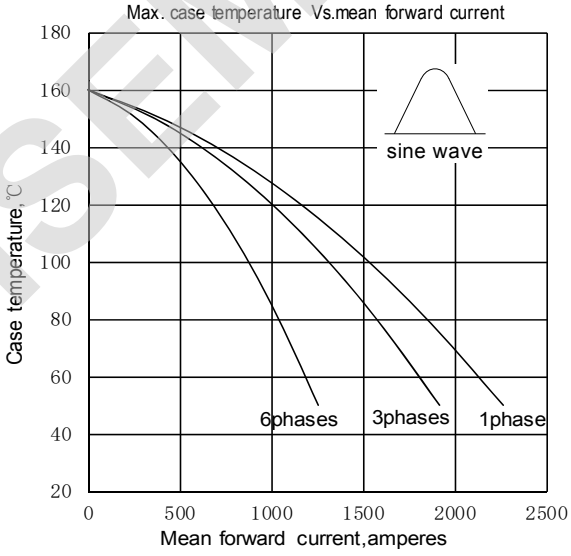


Fig.4

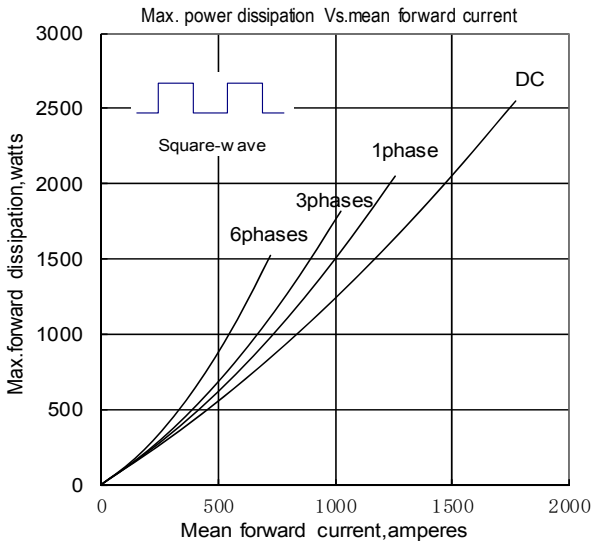


Fig.5

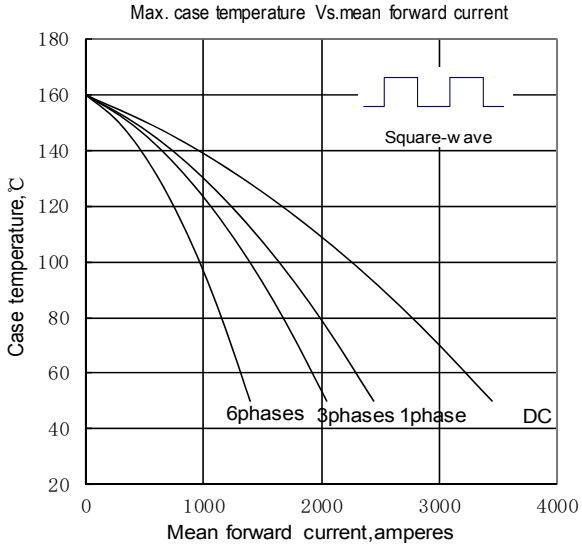


Fig.6

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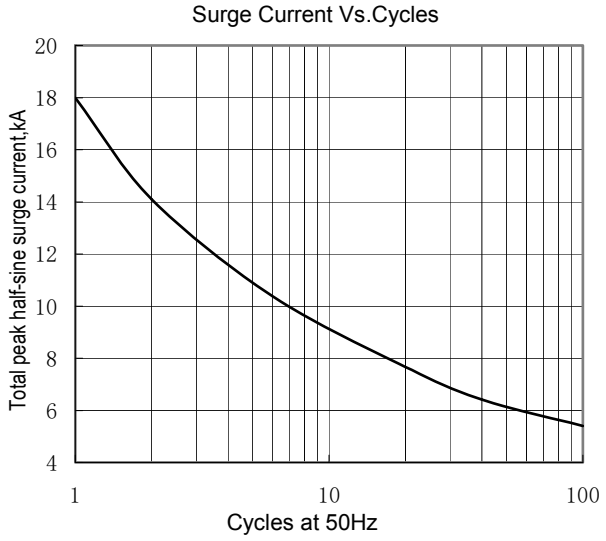


Fig.7

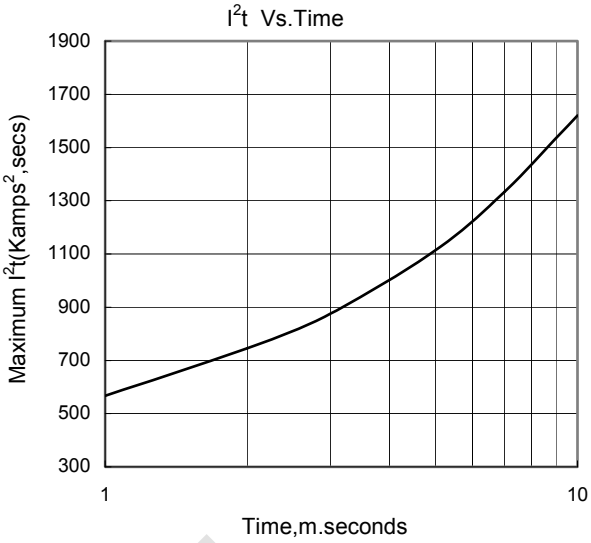
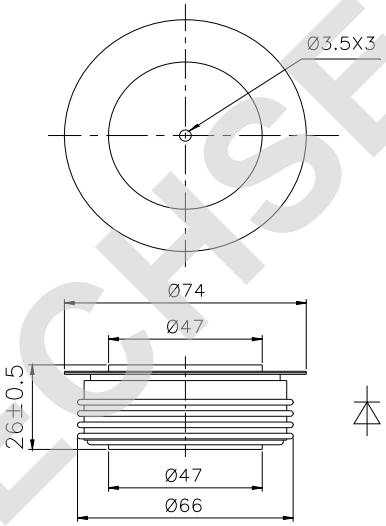


Fig.8

Outline:



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TECHSEM reserves the right to change specifications without notice.