

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. Y50ZPA-ZT50cT

I_{F(AV)}	5700A
V_{RRM}	200V 400V

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	190			5700	A
V _{RRM}	Repetitive peak reverse voltage	tp=10ms		190	200		400	V
I _{RRM}	Repetitive peak current	at V _{RRM}		190			50	mA
I _{FSM}	Surge forward current	10ms half sine wave		190			50	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}					12500	A ² s*10 ³
V _{FO}	Threshold voltage			190			0.73	V
r _F	Forward slope resistance						0.025	mΩ
V _{FM}	Peak forward voltage	I _{FM} =5000A, F=24kN		25			1.25	V
Q _{rr}	Recovery charge	I _{FM} =1000A, tp=4000μs, di/dt=-20A/μs, V _R =100V		190		1000		μC
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 5.0kN					0.017	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink					0.004		
F _m	Mounting force				19		26	kN
T _{vj}	Junction temperature				-40		190	°C
T _{stg}	Stored temperature				-40		190	°C
W _t	Weight					440		g
Outline	ZT50cT							

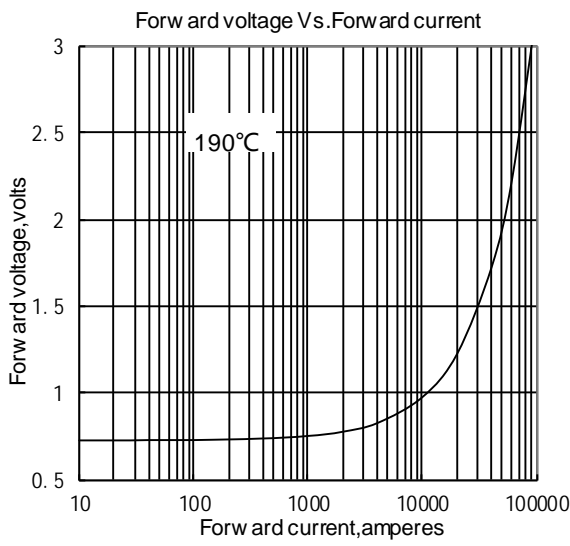


Fig1

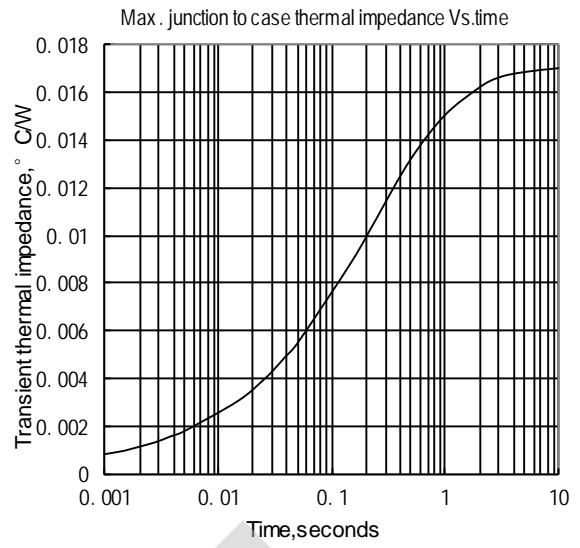


Fig2

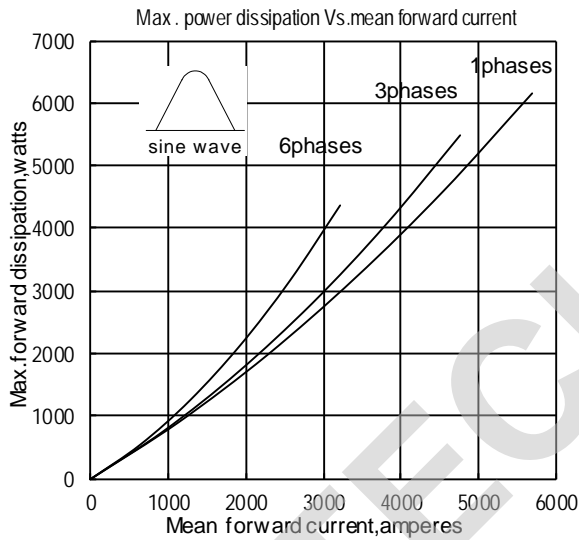


Fig3

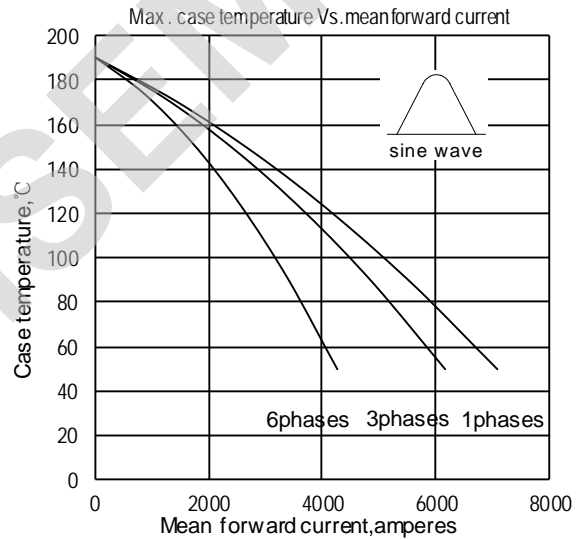


Fig4

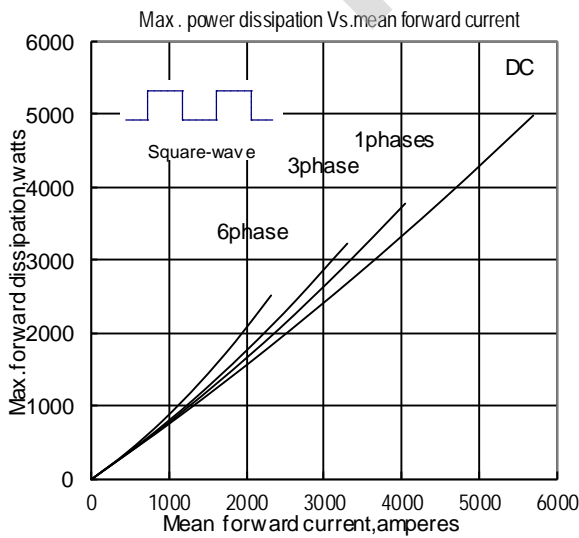


Fig5

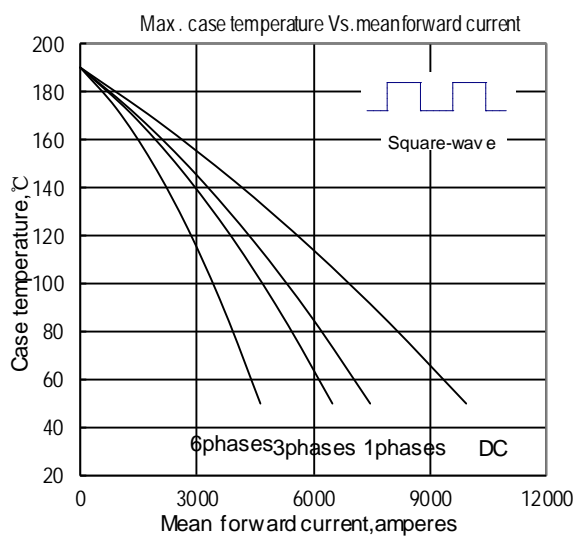


Fig6

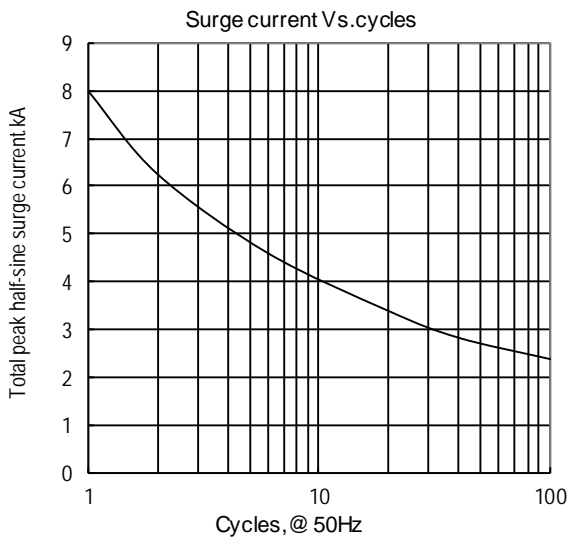


Fig7

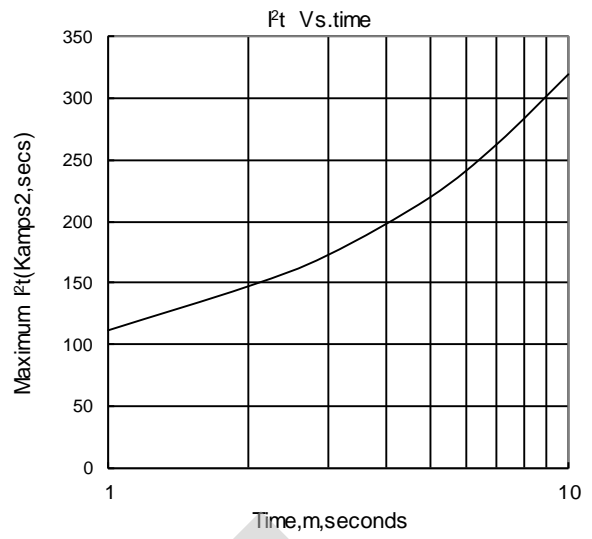
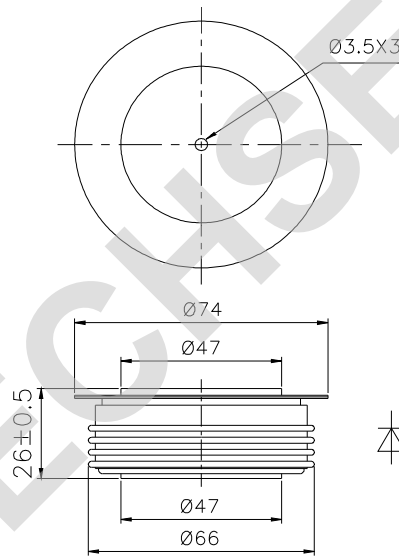


Fig8

Outline:



TECHSEM reserves the right to change specifications without notice.