

**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. Y40ZPC-ZT39cT

I_{F(AV)}	1790A	
V_{RRM}	1200V	1400V
	1600V	1800V
	2000V	

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	175			1790	A
V _{RRM}	Repetitive peak reverse voltage	tp=10ms		175	1100		2000	V
I _{RRM}	Repetitive peak current	V _{RM} = V _{RRM}		175			50	mA
I _{FSM}	Surge forward current	10ms half sine wave		175			18	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}					1620	A ² s*10 ³
V _{FO}	Threshold voltage			175			0.90	V
r _F	Forward slope resistance						0.204	mΩ
V _{FM}	Peak forward voltage	I _{FM} =3000A, F=18kN		25			2.0	V
Q _{rr}	Recovery charge	I _{FM} =1000A, tp=4000μs, di/dt=-20A/μs, V _R =100V		175		1900		μC
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 18.0kN					0.028	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink						0.0075	
F _m	Mounting force				15		20	kN
T _{vj}	Junction temperature				-40		175	°C
T _{stg}	Stored temperature				-40		175	°C
W _t	Weight					320		g
Outline	ZT39cT40							

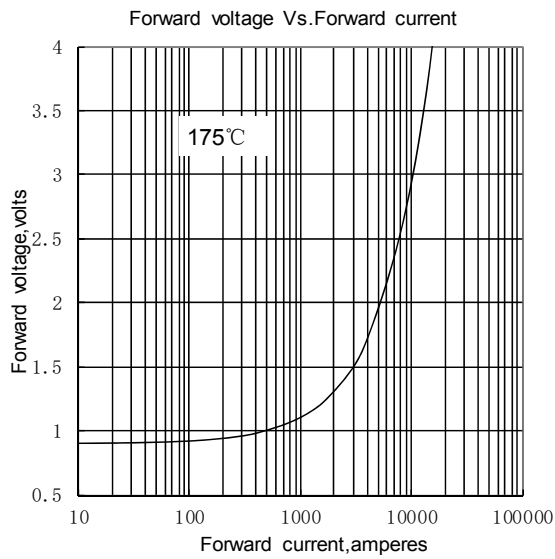


Fig.1

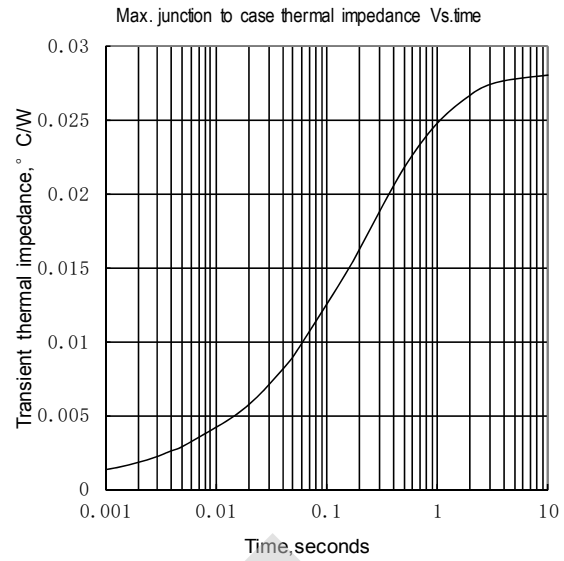


Fig.2

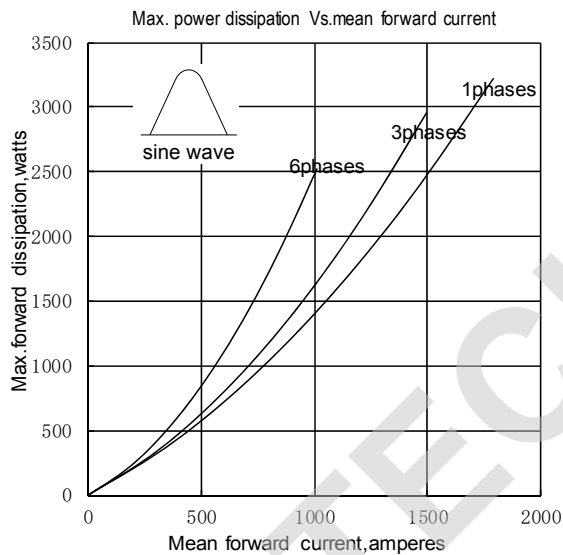


Fig.3

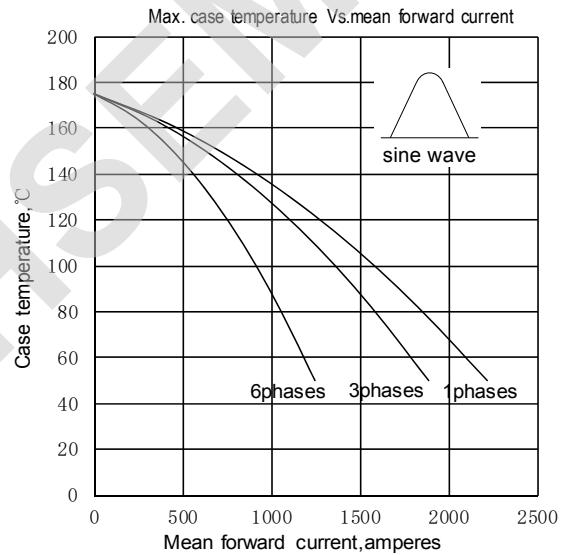


Fig.4

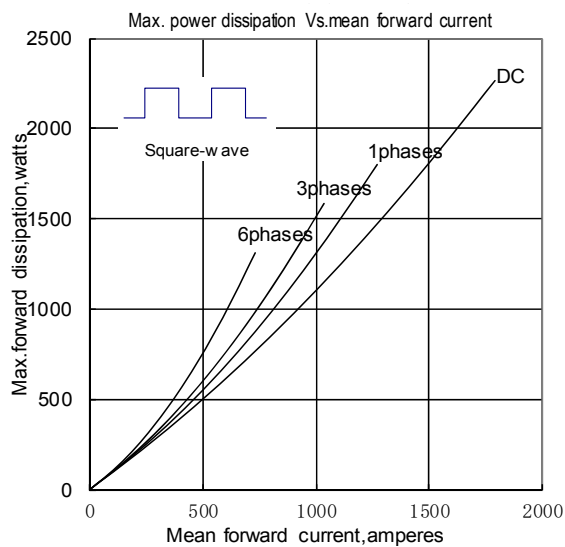


Fig.5

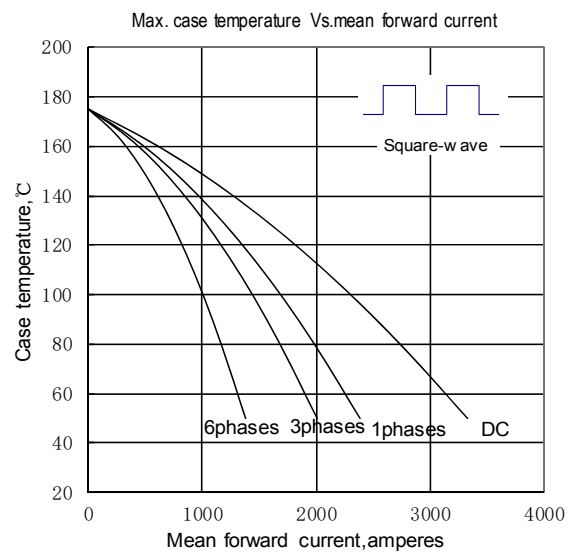


Fig.6

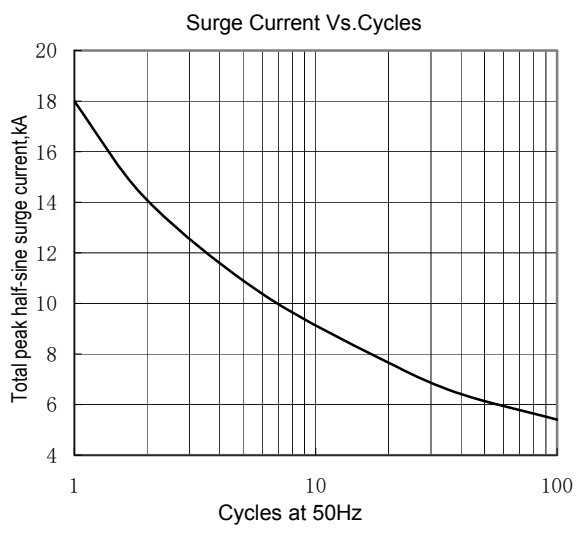


Fig.7

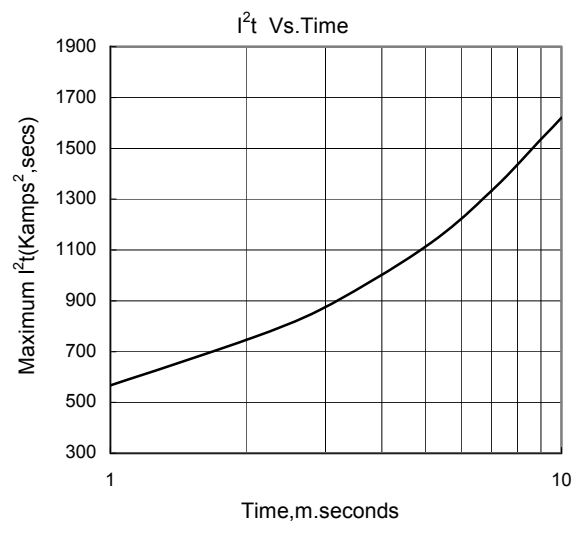
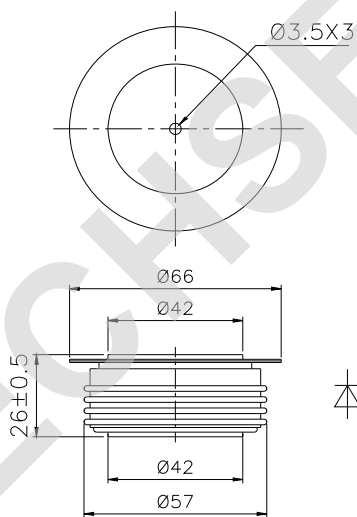


Fig.8

Outline:



TECHSEM reserves the right to change specifications without notice.