

**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. H50ZPU-ZT50dT

I_{F(AV)}	900 A
V_{RRM}	8100V 8300 V
	8500 V

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	150			900	A
V _{RRM}	Repetitive peak reverse voltage	tp=10ms		150	8000		8500	V
I _{RRM}	Repetitive peak current	at V _{RRM} tp=10ms		150			200	mA
I _{FSM}	Surge forward current	10ms half sine wave.		150			10	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}					500	10 ³ A ² s
V _{FO}	Threshold voltage			150			1.00	V
r _F	Forward slope resistance						1.00	mΩ
V _{FM}	Peak forward voltage	I _{FM} =1500A, F=24kN		25			2.60	V
Q _{rr}	Recovery charge	I _{FM} =1000A, tp=4000μs, di/dt=-20A/μs, V _R =100V		150		4000		μC
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine. double side cooled Clamping force 24kN					0.022	°C /W
R _{th(c-h)}	Thermal resistance case to heatsink						0.005	
F _m	Mounting force				19		26	kN
T _{vj}	Junction temperature				-40		150	°C
T _{stg}	Stored temperature				-40		160	°C
W _t	Weight					560		g
Outline	ZT50dT							

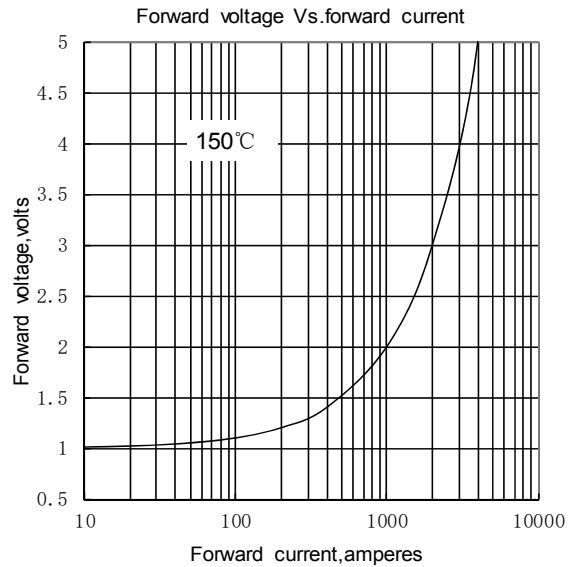


Fig.1

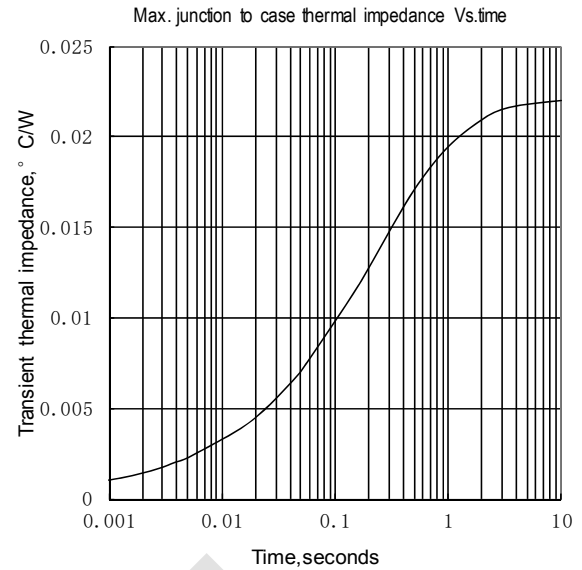


Fig.2

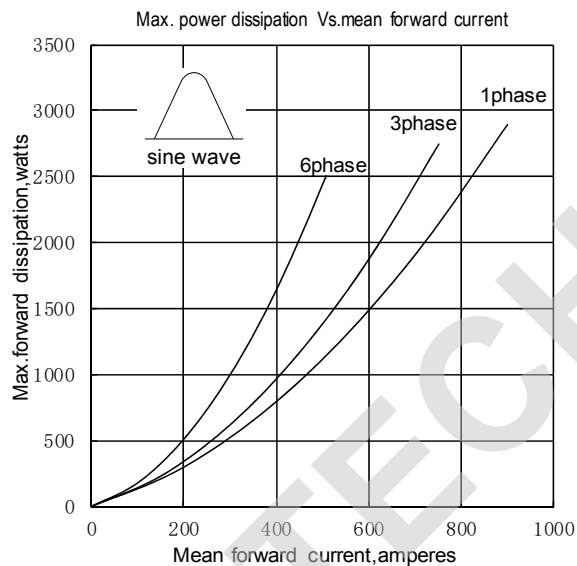


Fig.3

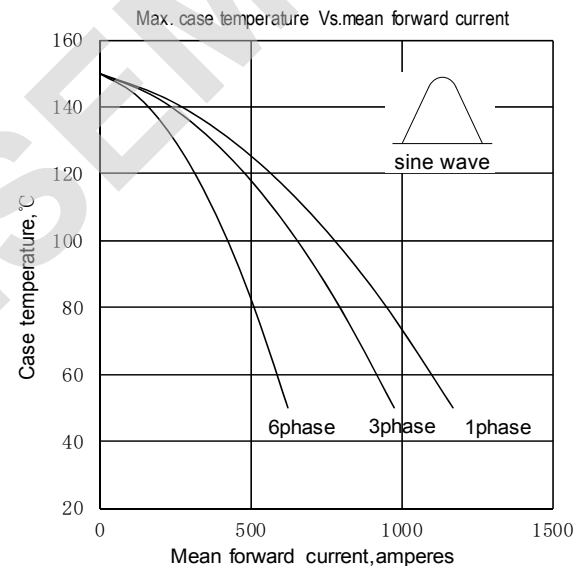


Fig.4

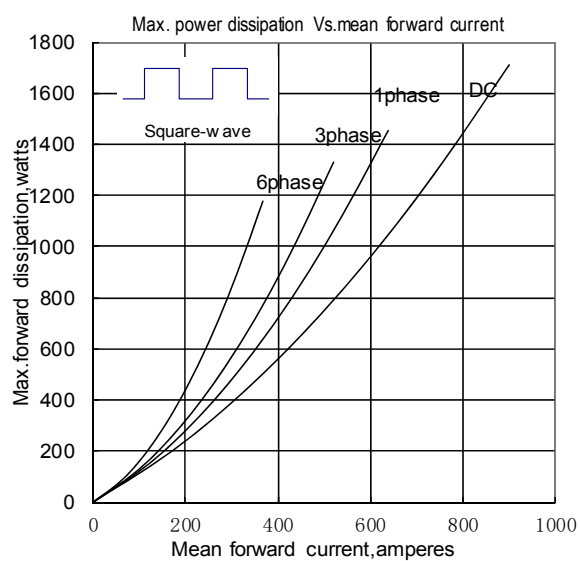


Fig.5

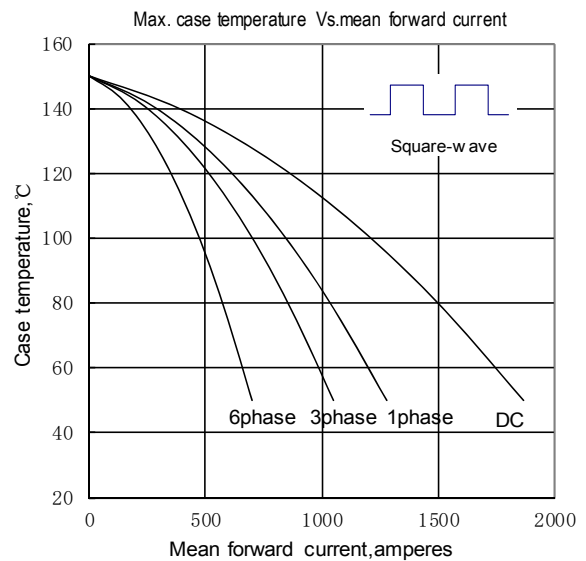


Fig.6

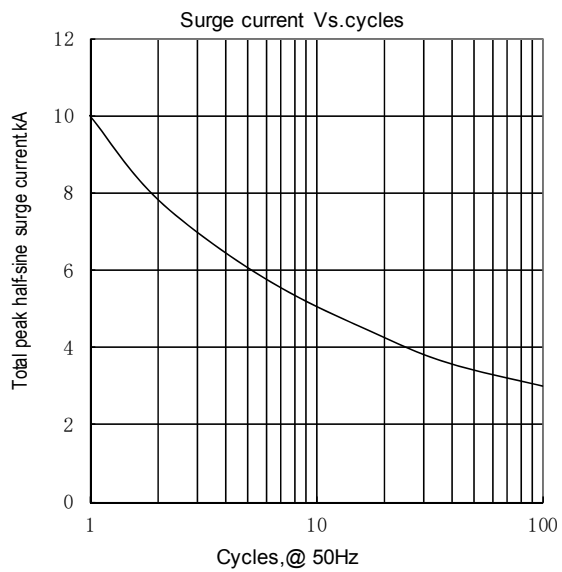


Fig.7

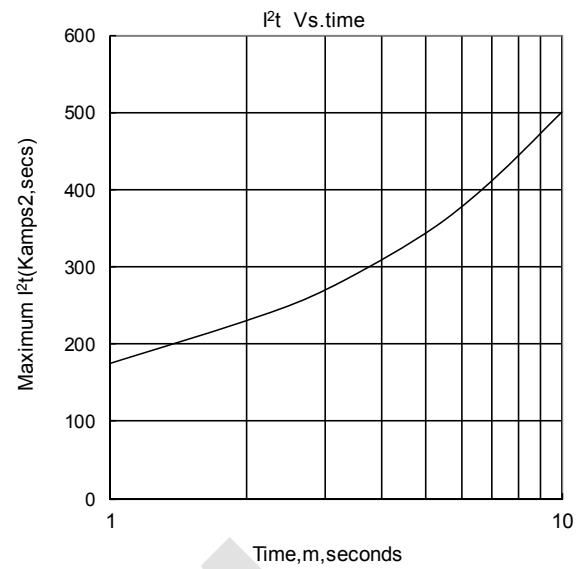
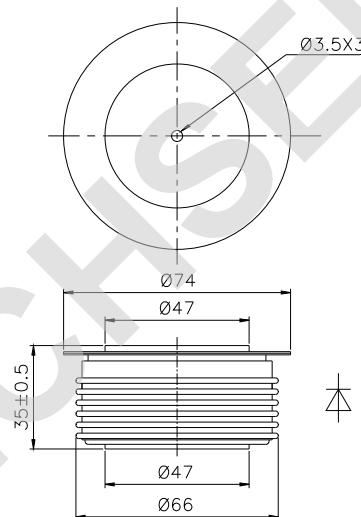


Fig.8

Outline:

TECHSEM reserves the right to change specifications without notice.