

Features

- Low forward voltage drop
- Soft recovery
- Hermetic metal cases with ceramic insulators

Typical Applications

- Inverters and choppers
- Motor control
- Snubber and free-wheeling diodes

Part No. Y50ZYB-ZT50cT		
I_{F(AV)}	1800A	
V_{R(RM)}	800V	1000V
	1200V	1400V

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 _{sink} =55°C	125			1800	A
I _{R(RM)}	Repetitive peak current	at V _{R(RM)}	125			100	mA
I _{FSM}	Surge forward current	10ms half sine wave V _R =0.6V _{R(RM)}	125			25	kA
I ² t	I ² t for fusing coordination					3125	A ² s*10 ³
V _{FO}	Threshold voltage		125			1.150	V
r _F	Forward slope resistance					0.138	mΩ
V _{FM}	Peak forward voltage	@ I _{FM} =3000A	25			1.70	V
		@ I _{FM} =4500A	125			1.77	
V _{FRM}	Maximum forward recovery voltage	di/dt=1000A/μs	125			14	V
			25			10	V
I _{rm}	Reverse recovery current				50	A	
t _{rr}	Reverse recovery time	I _{FM} =1000A, t _p =4000μs, -di/dt=60A/μs, V _R =50V	125			3.0	μs
Q _{rr}	Recovery charge				150	μC	
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine, double side cooled Clamping force 24kN				0.021	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink					0.005	
F _m	Mounting force				19	26	kN
T _{jop}	Operating temperature range				-40	125	°C
T _{stg}	Stored temperature				-40	150	°C
W _t	Weight					440	g
Outline	ZT50cT						

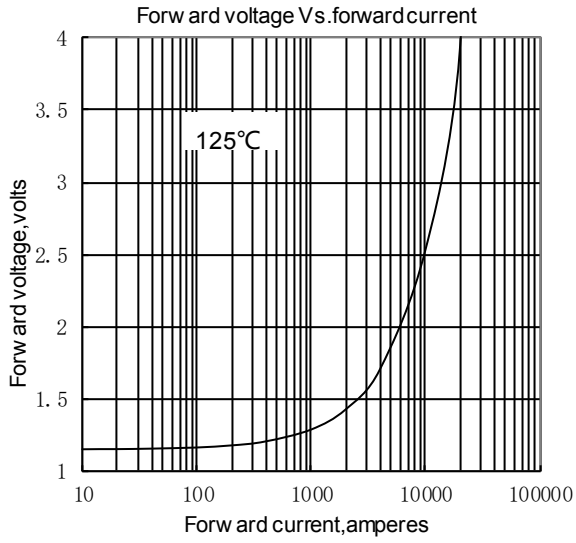


Fig.1

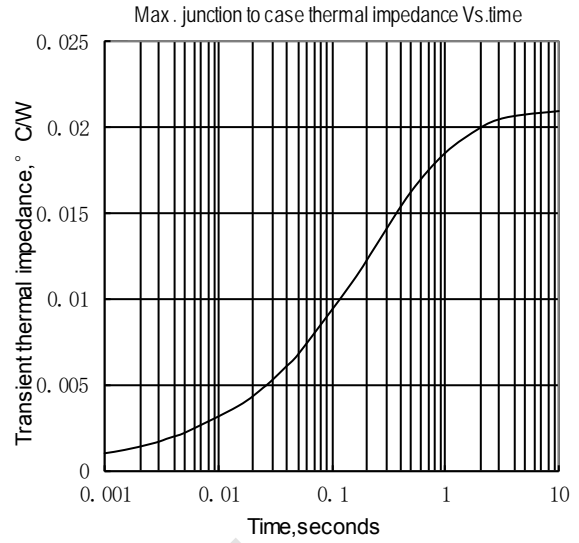


Fig.2

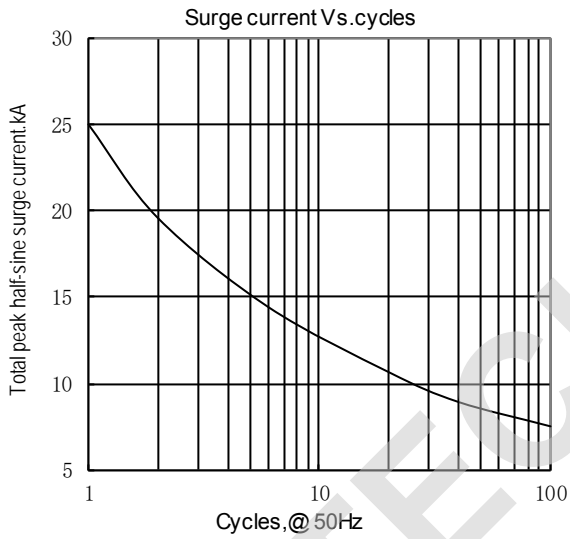


Fig.3

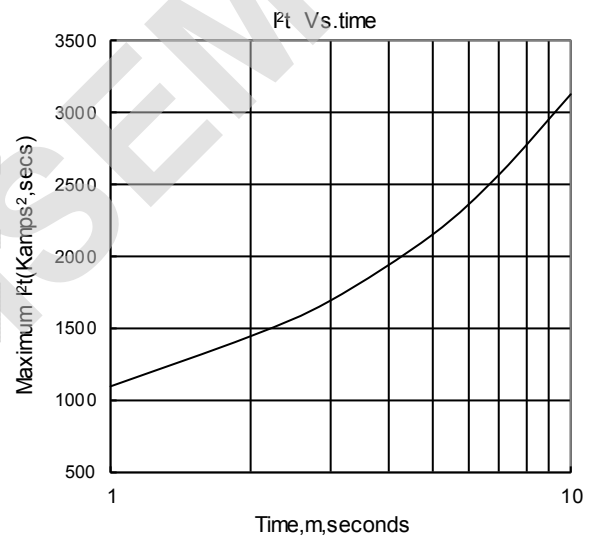


Fig.4

Outline

