

**Features**

Small recovered charge
Soft recovery
Up to 5000V reverse voltage
Capsule type metal-ceramic packages for double sided cooling

Typical Applications

Inverse diodes for power transistors, GTO thyristors
AC motor control
Snubber diodes and free-wheeling diodes

Part No. Y89ZKG-ZT84cT

$I_{F(AV)}$	2600A	
V_{RRM}	4000V	4200V
	4500V	5000V

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 =70°C	125			2600	A
V _{RRM}	Repetitive peak reverse voltage	tp=10ms		125	4000		5000	V
I _{RRM}	Repetitive peak current	at V _{RRM}		125			120	mA
I _{FSM}	Surge forward current	10ms half sine wave		125			40	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}					8000	A ² s*10 ³
V _{FO}	Threshold voltage			125			1.10	V
r _F	Forward slope resistance						0.47	mΩ
V _{FM}	Peak on-state voltage	I _{FM} =5000A, F=70kN		125			2.60	V
I _{rm}	Reverse recovery current	I _{FM} =2000A, tp=2000μs, di/dt=60A/μs, V _R =50V		125		450		A
t _{rr}	Reverse recovery time					15		μs
Q _{rr}	Recovery charge					4300		μC
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 70kN					0.005	°C/W
R _{th(c-h)}	Thermal resistance case to heatsink						0.0015	
F _m	Mounting force				63		84	kN
T _{stg}	Stored temperature				-40		125	°C
W _t	Weight					1390		g
Outline	ZT84cT							

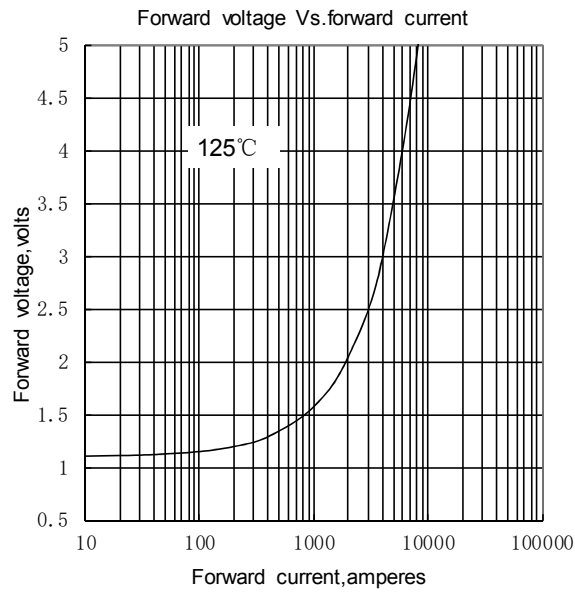


Fig.1

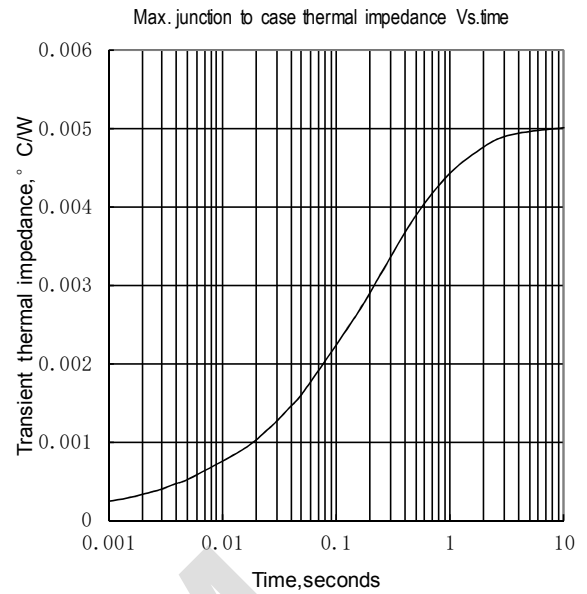


Fig.2

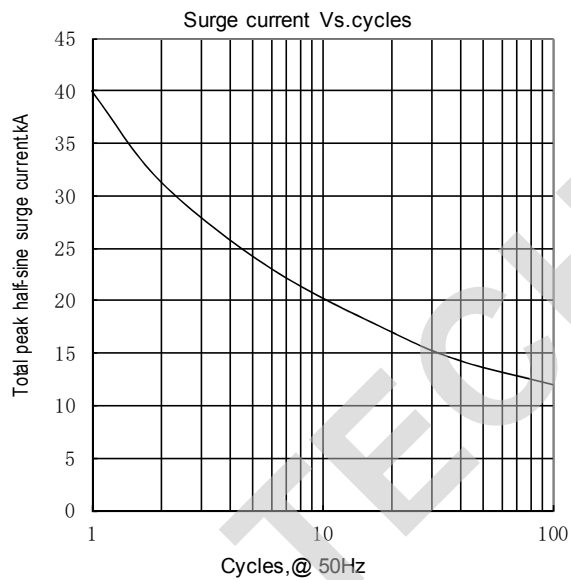


Fig.3

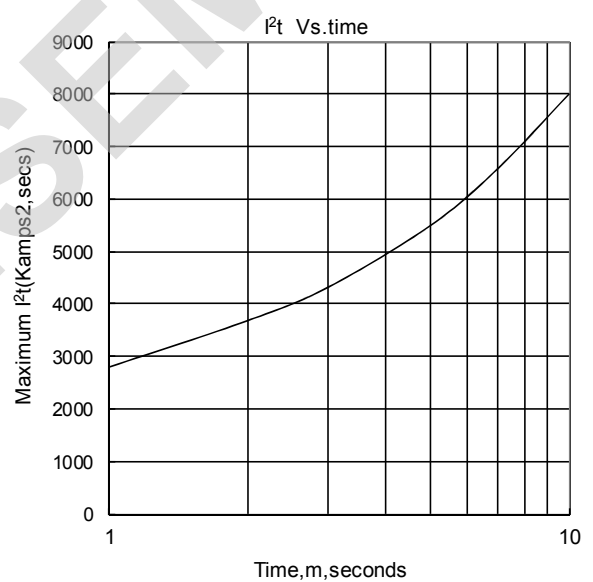


Fig.4

Outline: ZT84cT

