TECHSEM

Y30ZPB
RECTIFIER DIODE

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

$I_{F(AV)}$	**1230 A**	
V_{RRM}	**200~1000 V**	
I_{FSM}	**11**	**kA**
I^2t	**605**	**10^3A^2S**

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			1230	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms		190	200		1000	V
I_{RRM}	Repetitive peak current	at V_{RRM}		190			30	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}		190			11	kA
I^2t	I^2t for fusing coordination						605	A^2s*10^3
V_{FO}	Threshold voltage			190			0.95	V
r_F	Forward slope resistance						0.31	mΩ
V_{FM}	Peak forward voltage	I_{FM}=1200A, F=7.0kN		25			1.80	V
Q_{rr}	Recovery charge	I_{FM}=1000A, tp=1000μs, di/dt=-20A/μs, V_R=50V		190		1600		μC
$R_{th(j-C)}$	Thermal resistance Junction to case	At 180^0 sine, double side cooled Clamping force 7.0kN					0.045	°C /W
$R_{th(C-h)}$	Thermal resistance case to heat sink						0.010	
F_m	Mounting force				5.3		10	kN
T_{stg}	Stored temperature				-40		190	°C
W_t	Weight					80		g
Outline	ZT25aT							

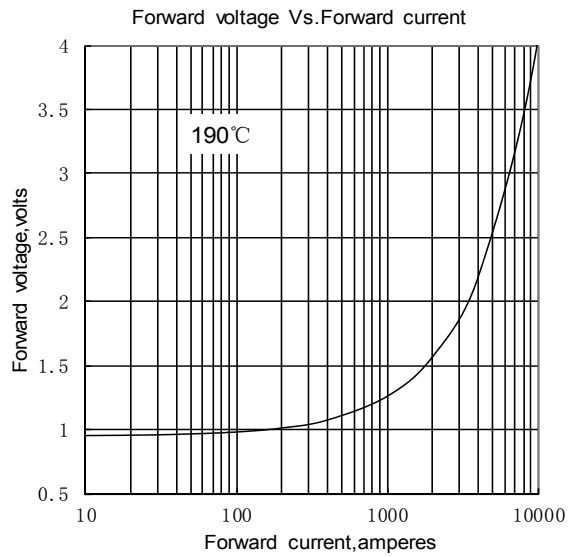

Fig1

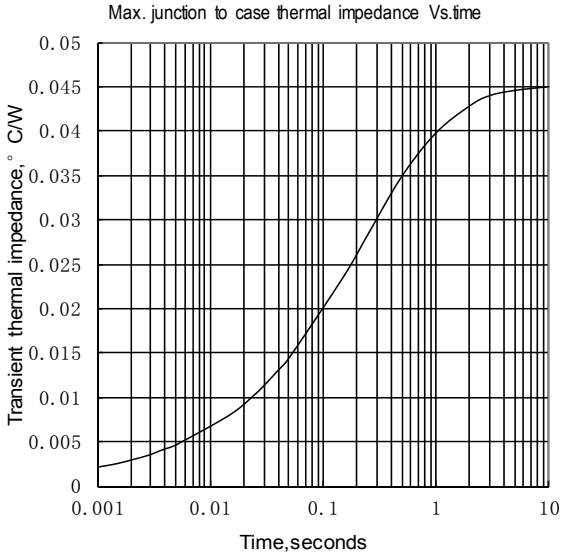

Fig2

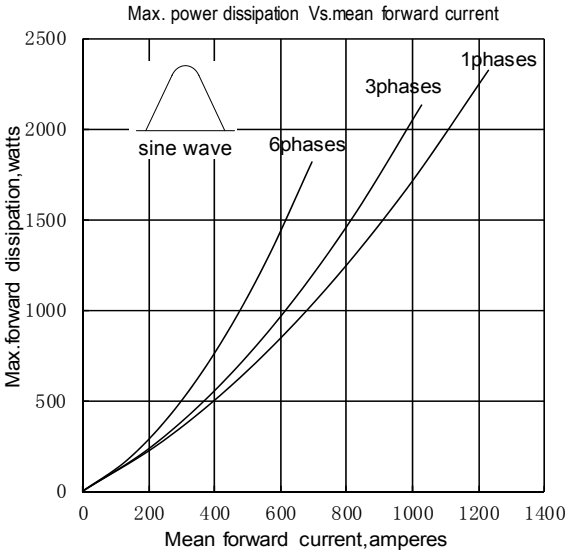

Fig3

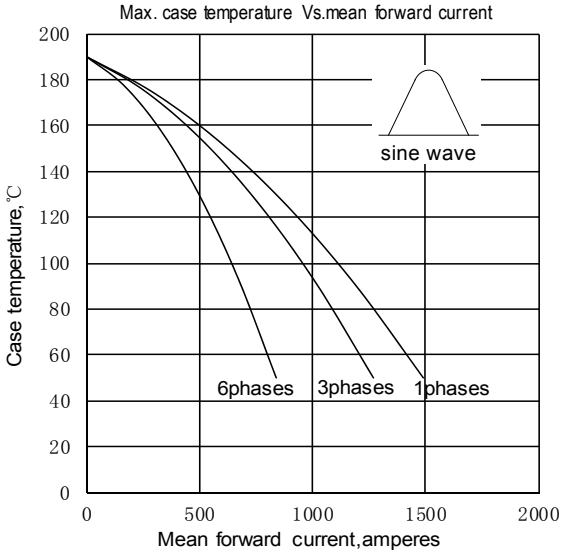

Fig4

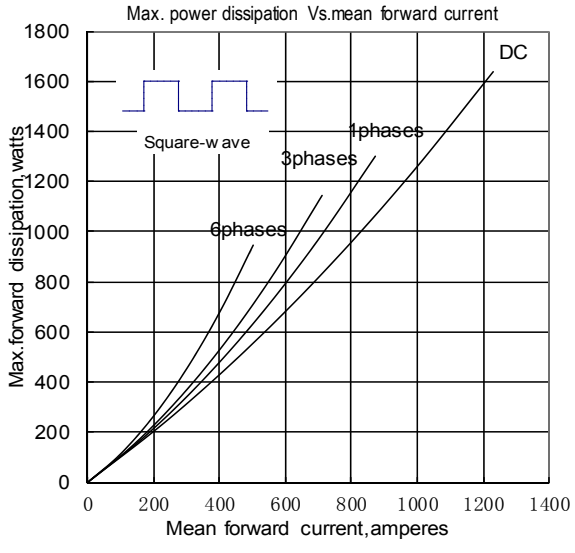

Fig5

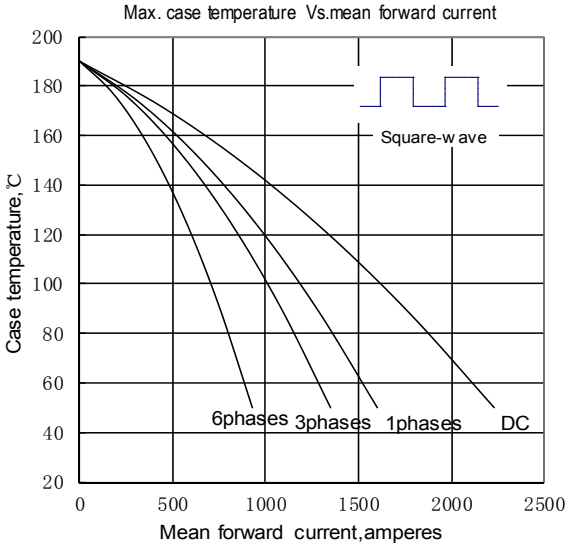

Fig6

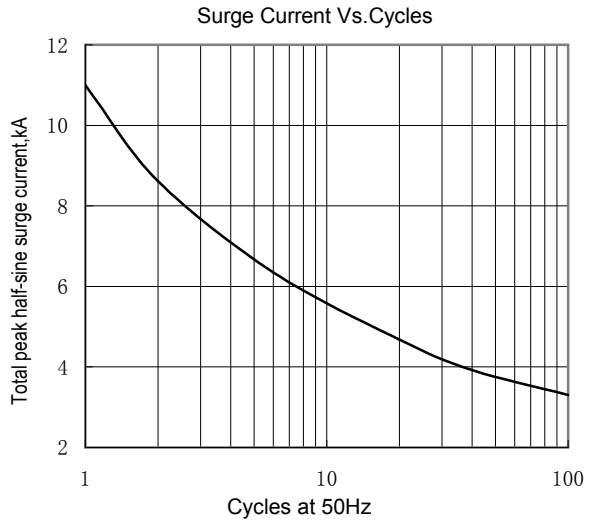

Fig.7

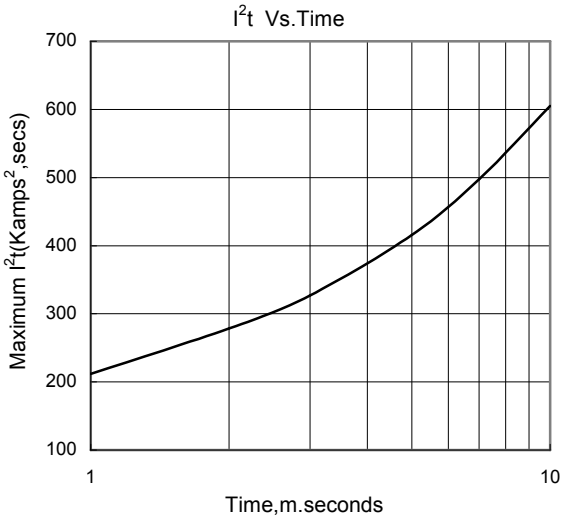

Fig.8

Outline: