TECHSEM

Y38ZPG
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 rectifiers
- Controlled rectifiers

$I_{F(AV)}$	920 A
V_{RRM}	4300~5000 V
I_{FSM}	8.6 kA
I^2t	369 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	150			920	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms		150	4300		5000	V
I_{RRM}	Repetitive peak current	at V_{RRM}		150			50	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}		150			8.6	kA
I^2t	I^2t for fusing coordination						369	A^2s*10^3
V_{FO}	Threshold voltage			150			0.99	V
r_F	Forward slope resistance						0.45	mΩ
V_{FM}	Peak forward voltage	I_{FM}=1000A, F=20kN		25			2.00	V
Q_{rr}	Recovery charge	I_{FM}=1000A, tp=2000μs, di/dt=－20A/μs, V_R=50V		150		2500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180^0 sine, double side cooled Clamping force 15.0kN					0.035	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.008	
F_m	Mounting force				10		20	kN
T_{stg}	Stored temperature				-40		160	°C
W_t	Weight					240		g
Outline	ZT33cT							

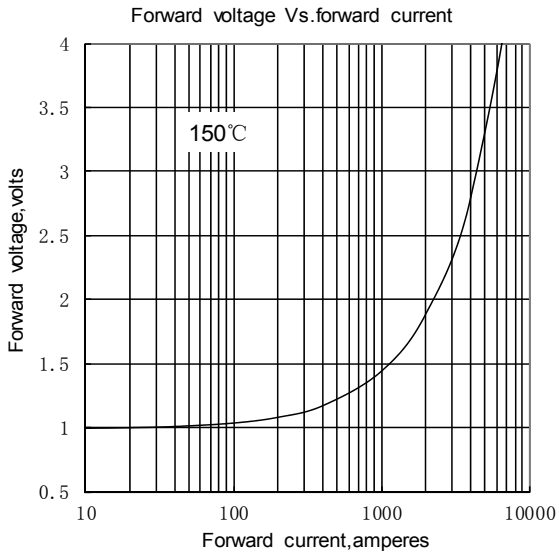

Fig.1

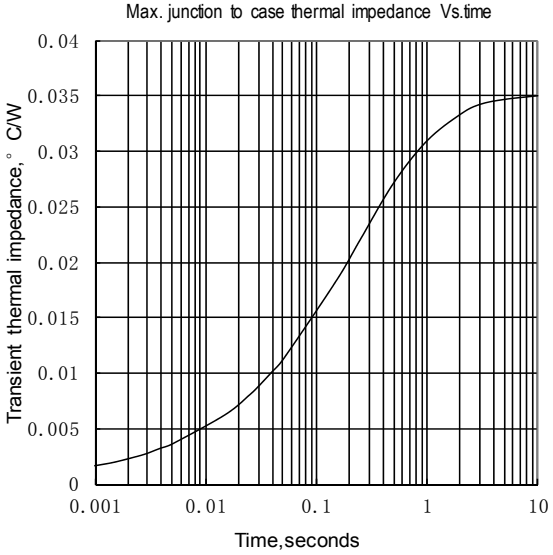

Fig.2

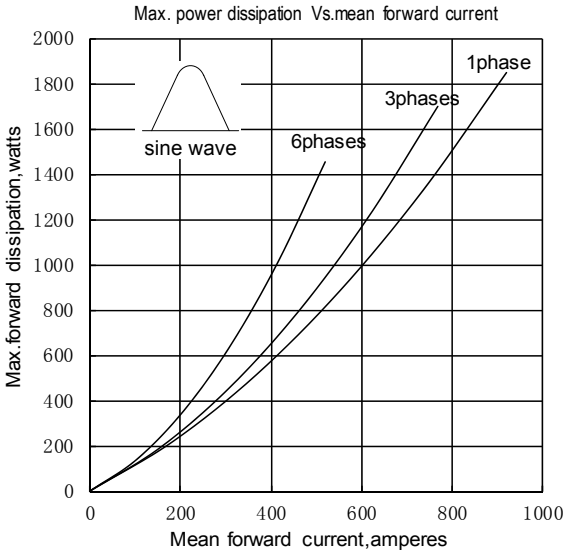

Fig.3

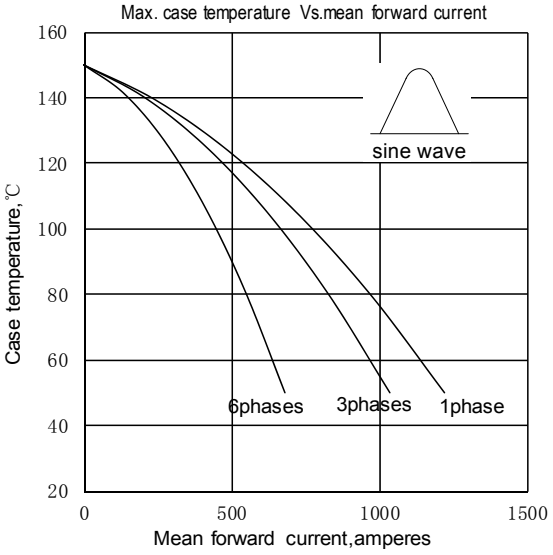

Fig.4

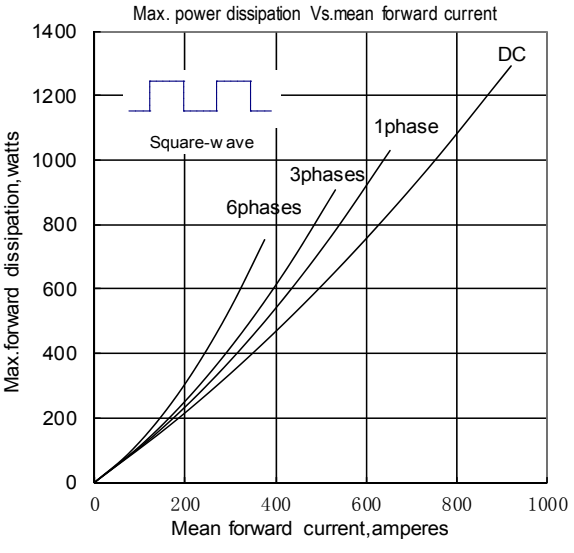

Fig.5

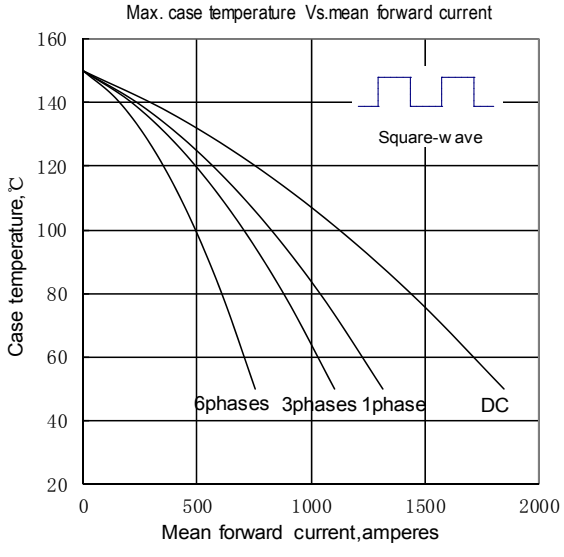

Fig.6

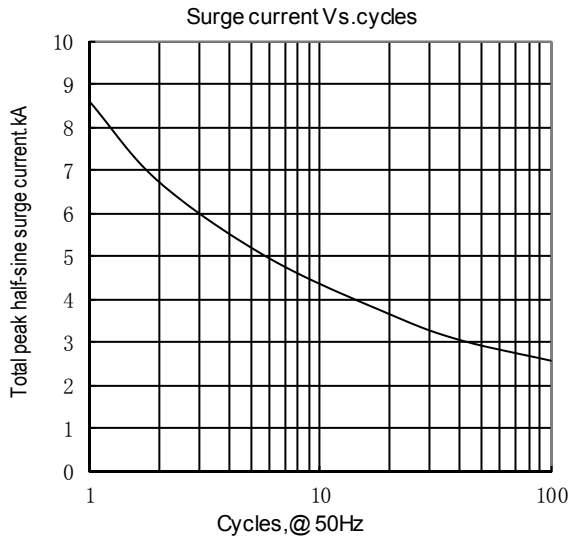

Fig7

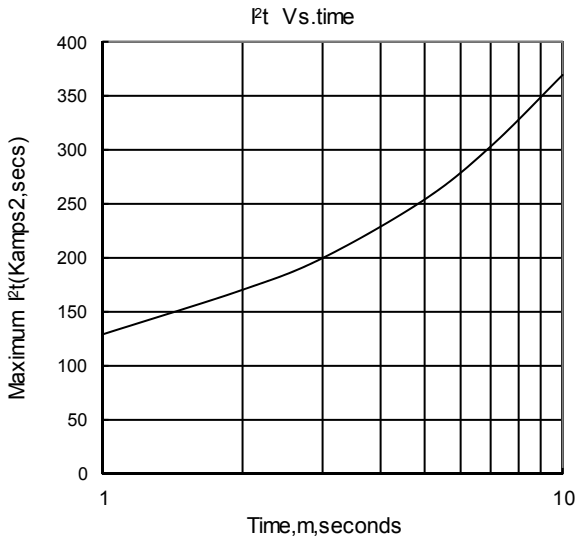

Fig8

Outline: