

Features

- n Low forward voltage drop
- n High reverse voltage
- n Hermetic metal cases with ceramic insulators

Typical Applications

- n All purpose high power rectifier diodes
- n High power resistance welding equipment
- n Non-controllable and half-controllable rectifiers
- n Controlled rectifiers

Part No. Y38ZPE-ZT33cT			
I_{F(AV)}	750A		
V_{RRM}	3200V	3500V	
	4000V	4200V	

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			860	A
			T _C =100°C			750	
V _{RRM}	Repetitive peak reverse voltage	tp=10ms	160	3200		4200	V
I _{RRM}	Repetitive peak current	at V _{RRM}	160			50	mA
I _{FSM}	Surge forward current	10ms half sine wave V _R =0.6V _{RRM}	160			11	kA
I ² t	I ² t for fusing coordination					605	A ² s*10 ³
V _{FO}	Threshold voltage		160			0.90	V
r _F	Forward slop resistance					0.75	mΩ
V _{FM}	Peak on-state voltage	I _{FM} =1500A, F=15kN	160			2.03	V
Q _{rr}	Recovery charge	I _{FM} =1000A, tp=4000μs, di/dt=-20A/μs, V _R =100V	160		2000		μC
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 15kN				0.035	°C/W
R _{th(c-h)}	Thermal resistance case to heat sink					0.010	
F _m	Mounting force			10		20	kN
T _{vj}	Junction temperature			-40		160	°C
T _{stg}	Stored temperature			-40		160	°C
W _t	Weight				240		g
Outline	ZT33cT						

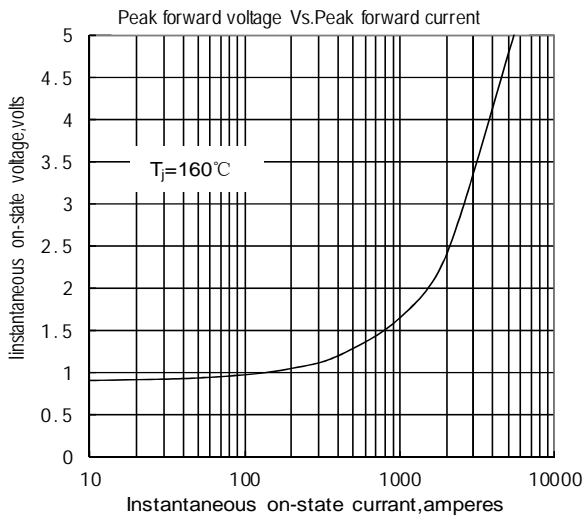


Fig.1

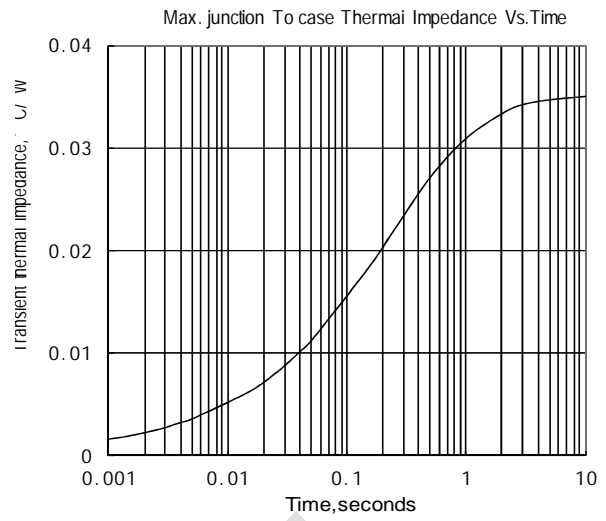


Fig.2

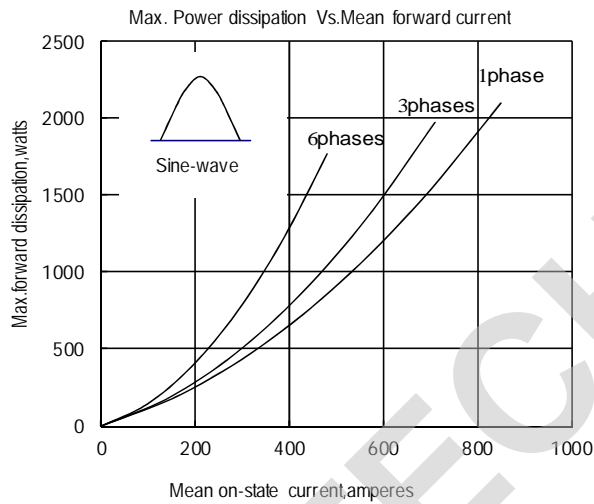


Fig.3

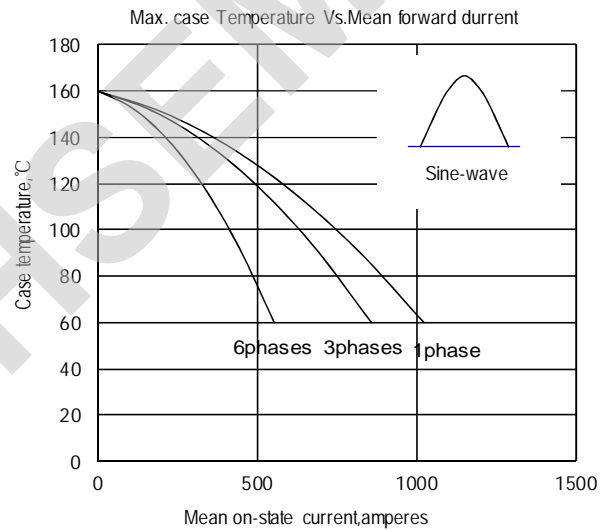


Fig.4

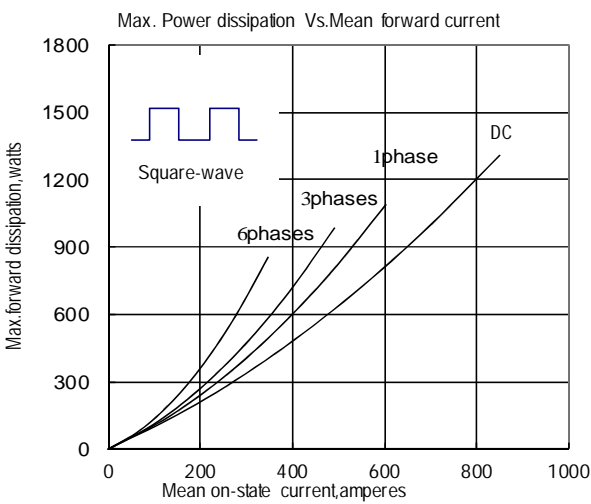


Fig.5

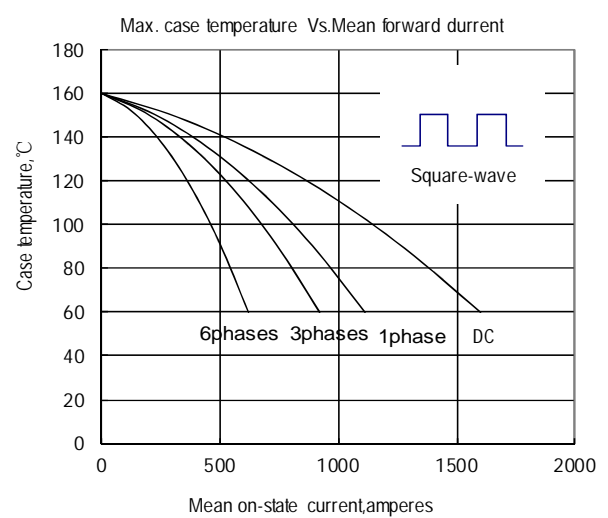


Fig.6

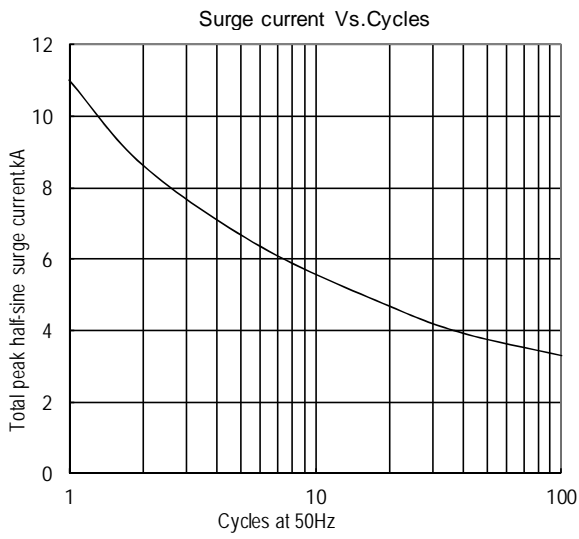


Fig.7

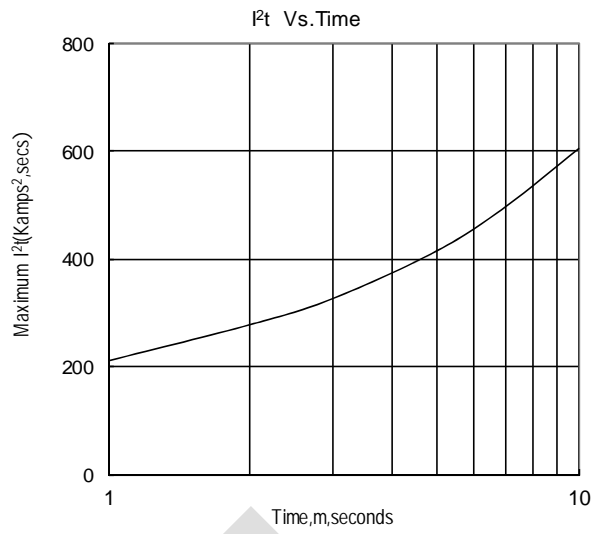
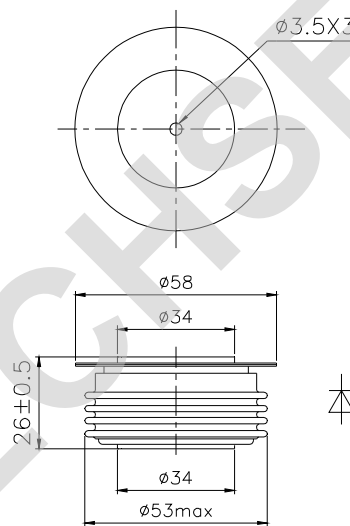


Fig.8

Outline:



TECHSEM reserves the right to change specifications without notice.