

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

Part No. Y76ZPD-ZT73dT

$I_{F(AV)}$	4000A	
V_{RRM}	2200V	2500V
	2800V	3000V

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	160			4000	A
V _{RRM}	Repetitive peak reverse voltage	tp=10ms		160	2200		3000	V
I _{RRM}	Repetitive peak current	at V _{RRM} tp=10ms		160			200	mA
I _{FSM}	Surge forward current	10ms half sine wave V _R =0.6V _{RRM}		160			45	kA
I ² t	I ² t for fusing coordination					10125	10 ³ A ² s	
V _{FO}	Threshold voltage			160			0.90	V
r _F	Forward slope resistance					0.099	mΩ	
V _{FM}	Peak forward voltage	I _{FM} =5000A, F=40kN		25			1.54	V
Q _{rr}	Recovery charge	I _{FM} =2000A, tp=4000μs, di/dt=-20A/μs, V _R =100V		160		5000		μC
R _{th(j-c)}	Thermal resistance Junction to case	Double side cooled Clamping force 40kN					0.010	C/W
R _{th(c-h)}	Thermal resistance case to heatsink						0.003	
F _m	Mounting force				35		47	kN
T _{vj}	Junction temperature				-40		160	C
T _{stg}	Stored temperature				-40		160	C
W _t	Weight					1460		g
Outline	ZT73dT							

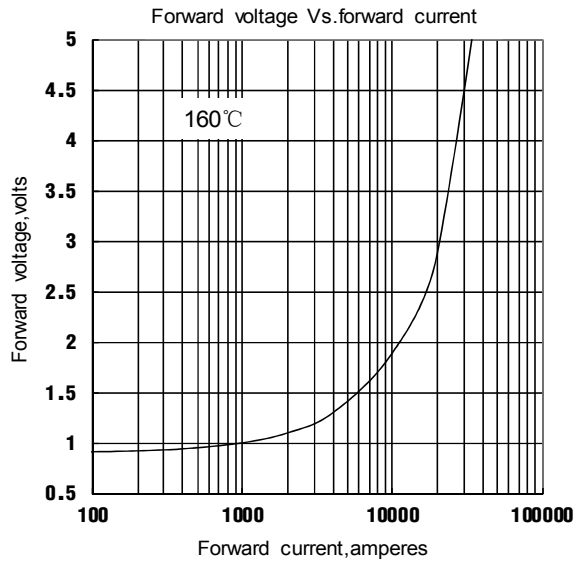


Fig.1

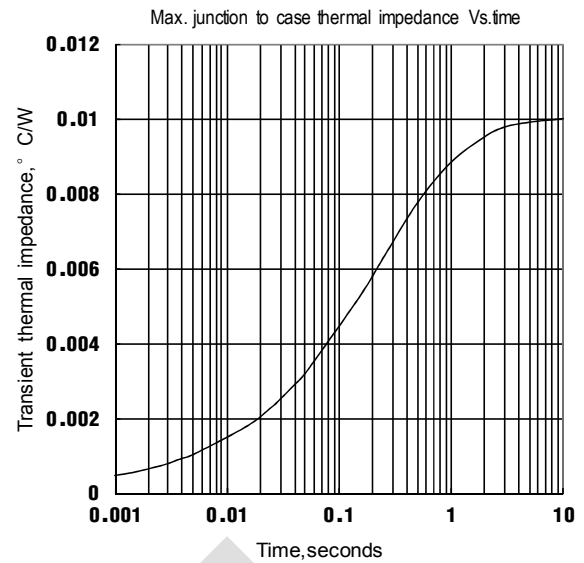


Fig.2

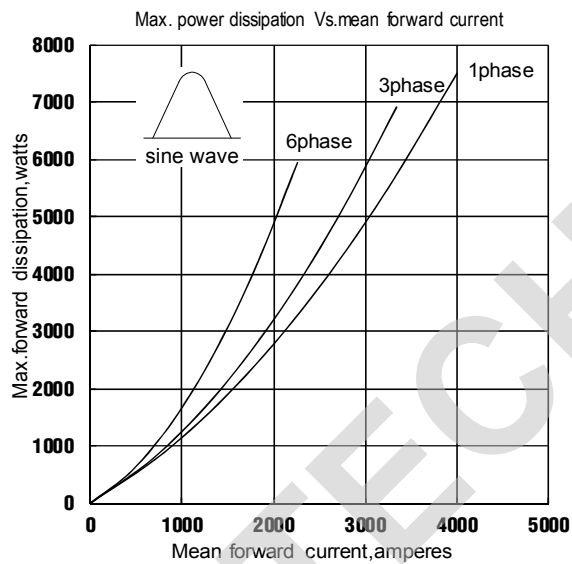


Fig.3

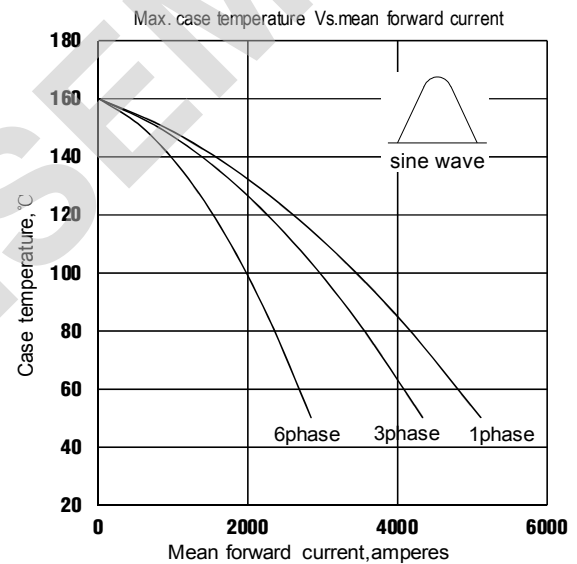


Fig.4

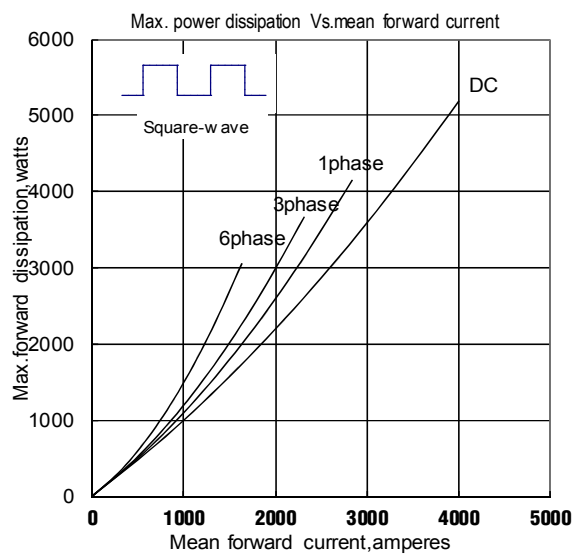


Fig.5

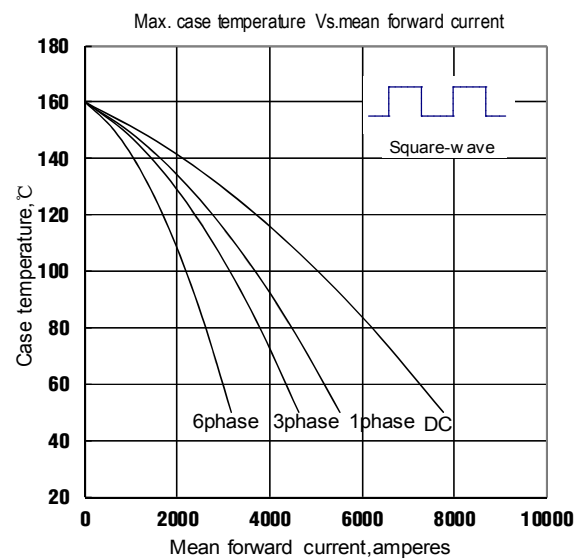


Fig.6

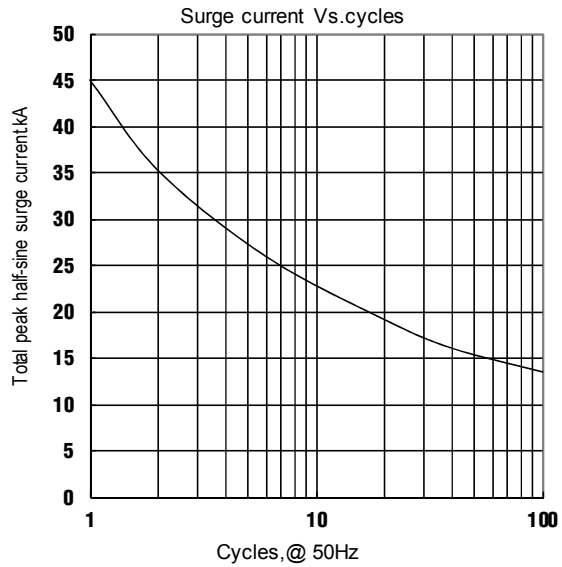


Fig.7

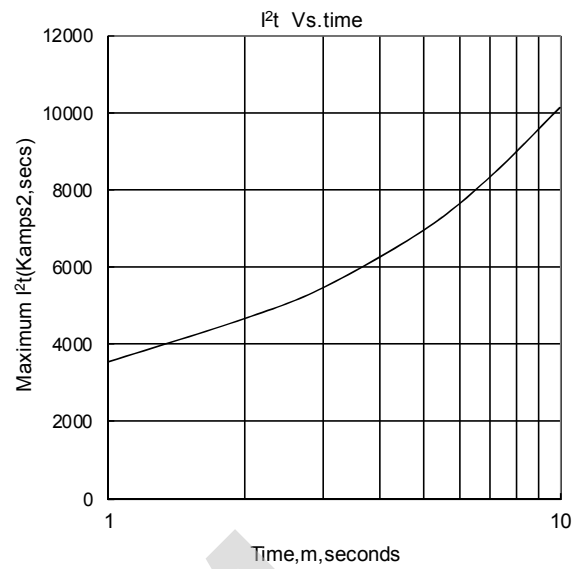
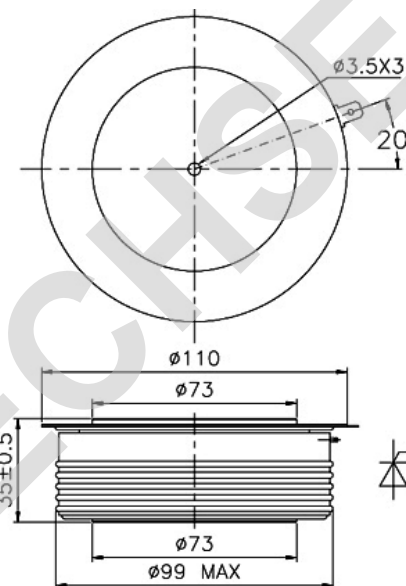


Fig.8

Outline:

TECHSEM reserves the right to change specifications without notice.