

**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

Part No. T76ZPR-ZT73cT

$I_{F(AV)}$	2000A
V_{RRM}	5600V 6000V 6500V

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, $T_C=100^\circ\text{C}$	150			2000	A
V_{RRM}	Repetitive peak reverse voltage	$t_p=10\text{ms}$	150	5600		6500	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			300	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			35	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				6125	$10^3\text{A}^2\text{s}$
V_{FO}	Threshold voltage		150			0.94	V
r_F	Forward slope resistance					0.27	mΩ
V_{FM}	Peak forward voltage	$I_{FM}=3000\text{A}$, $F=47\text{kN}$	25			1.80	V
Q_{rr}	Recovery charge	$I_{FM}=2000\text{A}$, $t_p=4000\mu\text{s}$, $di/dt=-20\text{A}/\mu\text{s}$, $V_R=100\text{V}$	150		6500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine: double side cooled Clamping force 47kN				0.011	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		150	°C
T_{stg}	Stored temperature			-40		160	°C
W_t	Weight				1100		g
Outline	ZT73cT						

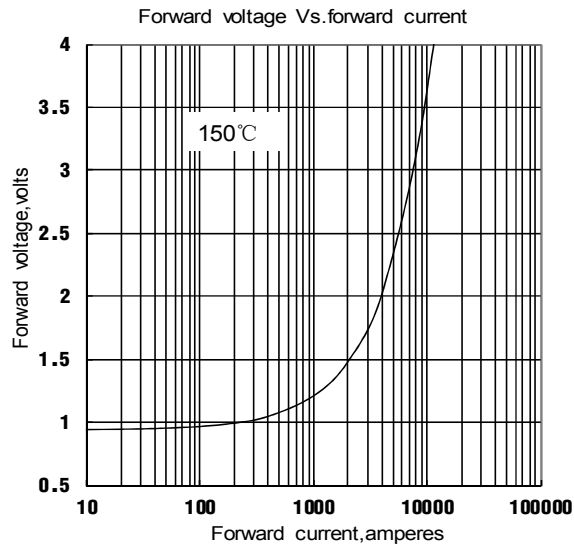


Fig.1

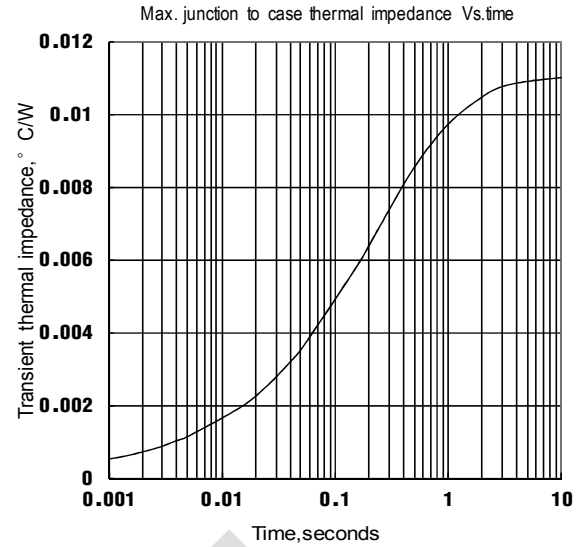


Fig.2

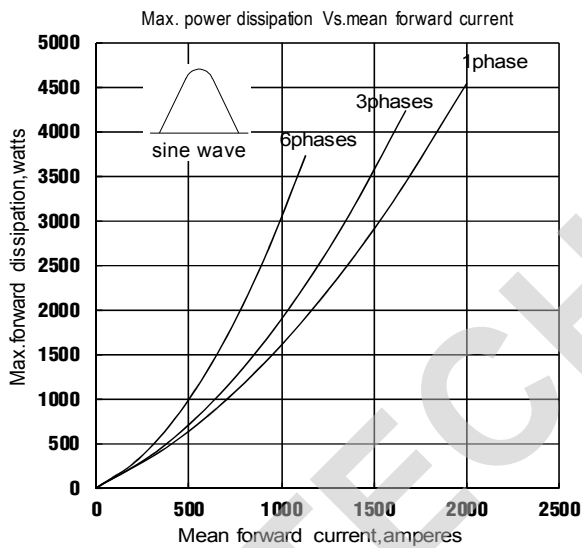


Fig.3

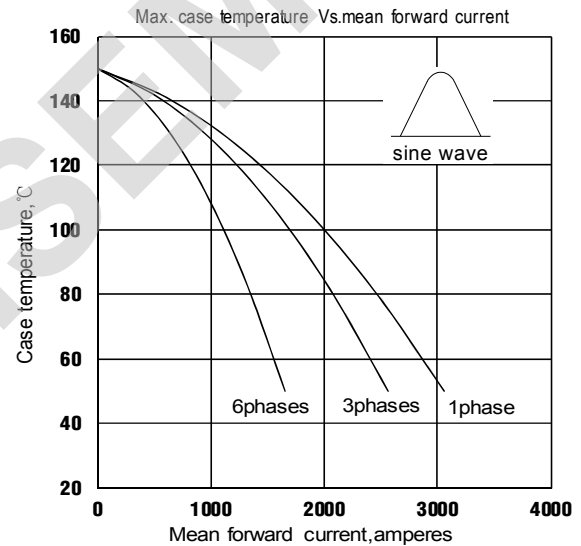


Fig.4

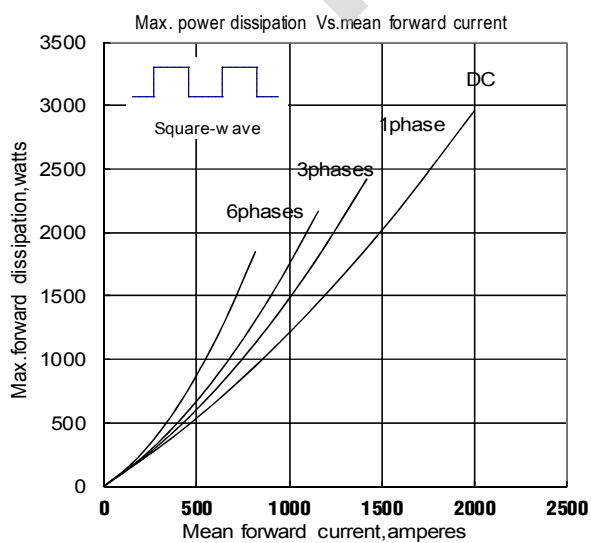


Fig.5

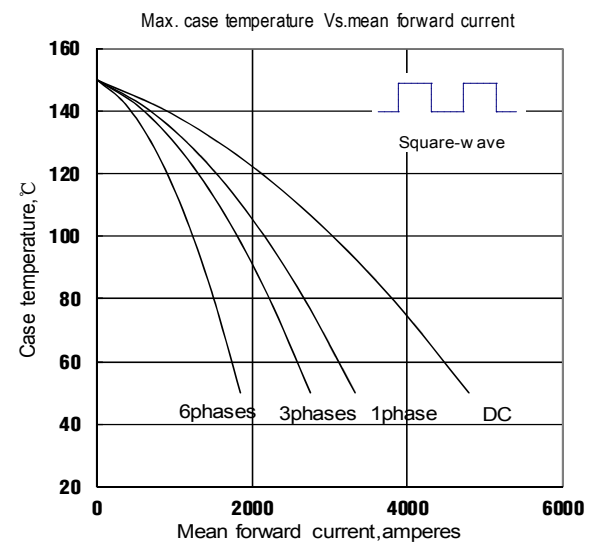


Fig.6

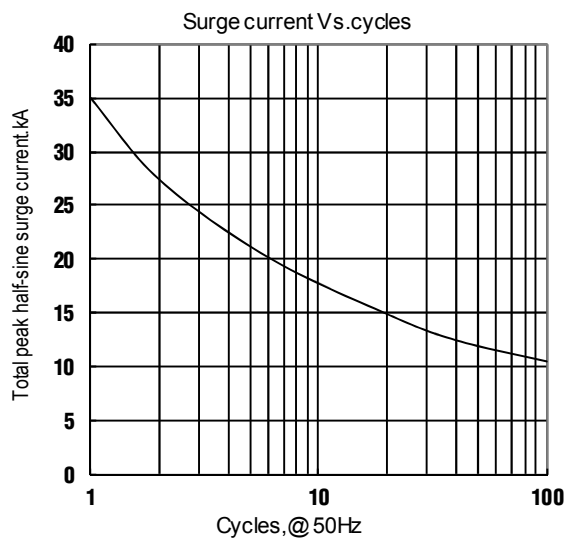


Fig7

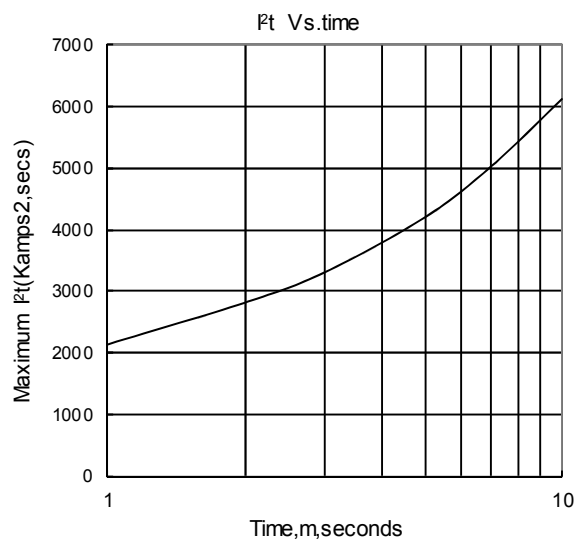
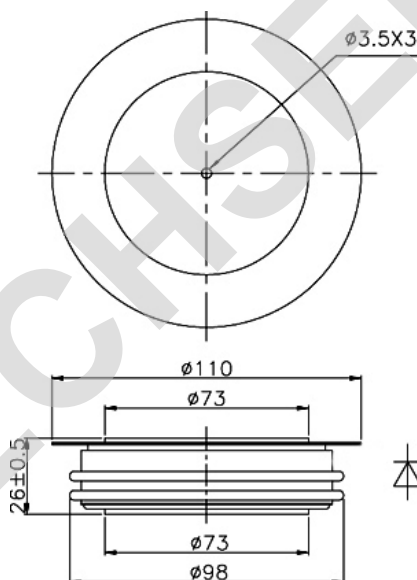


Fig8

Outline:

TECHSEM reserves the right to change specifications without notice.