

**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. Y89ZPG-ZT84cT

$I_{F(AV)}$	4500A
V_{RRM}	4500V 5000V

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}\text{C})$	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,	$T_C=85^{\circ}\text{C}$	150		4500	A
			$T_C=100^{\circ}\text{C}$			3800	
V_{RRM}	Repetitive peak reverse voltage	$t_p=10\text{ms}$	150	4300		5000	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			300	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			46	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				10580	$10^3\text{A}^2\text{s}$
V_{FO}	Threshold voltage		150			0.91	V
r_F	Forward slope resistance					0.10	m Ω
V_{FM}	Peak forward voltage	$I_{FM}=5000\text{A}$, $F=70\text{kHz}$	25			1.65	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		9000		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 70kN				0.007	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.002	
F_m	Mounting force			63		84	kN
T_{vj}	Junction temperature			-40		150	$^{\circ}\text{C}$
T_{stg}	Stored temperature			-40		160	$^{\circ}\text{C}$
W_t	Weight				1390		g
Outline	ZT84cT						

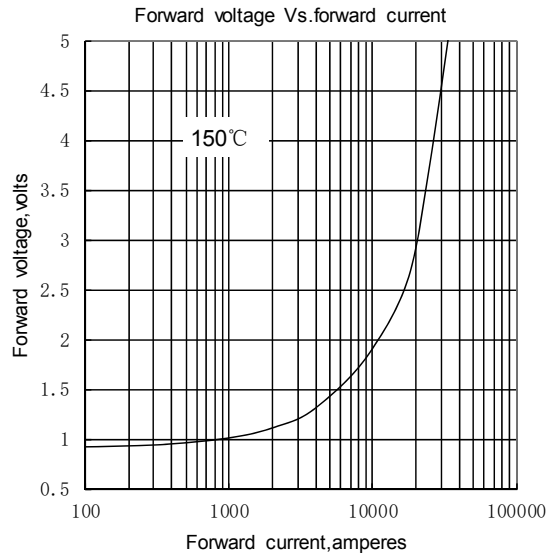


Fig.1

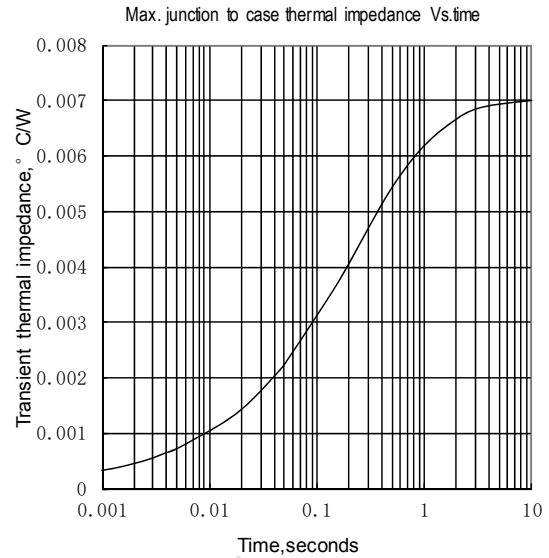


Fig.2

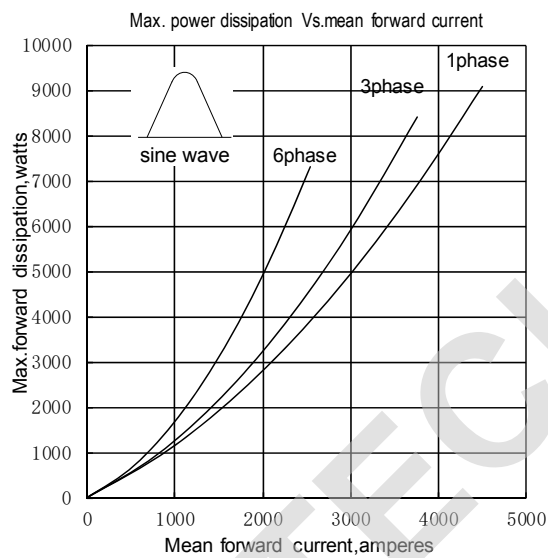


Fig.3

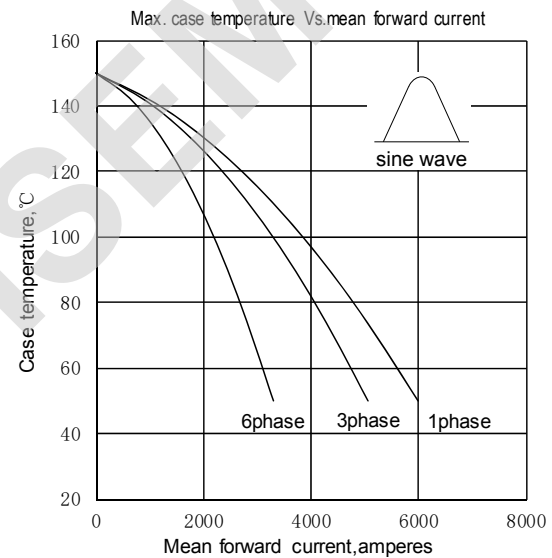


Fig.4

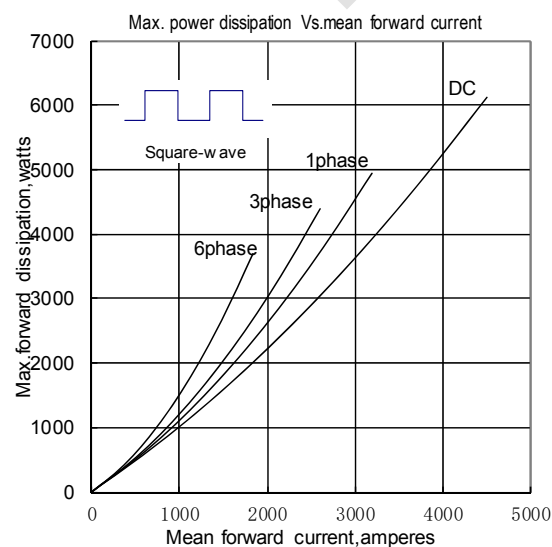


Fig.5

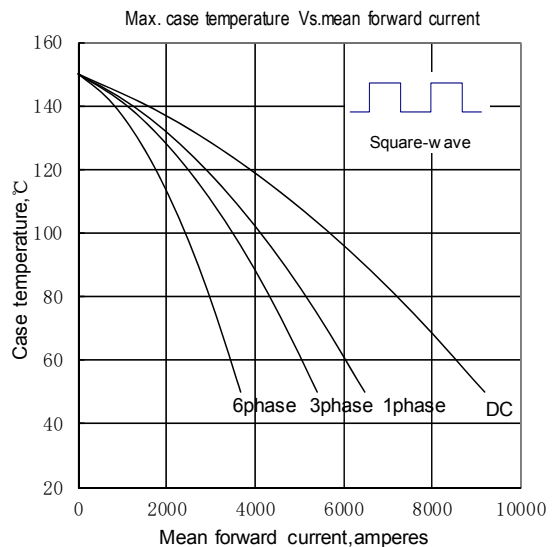


Fig.6

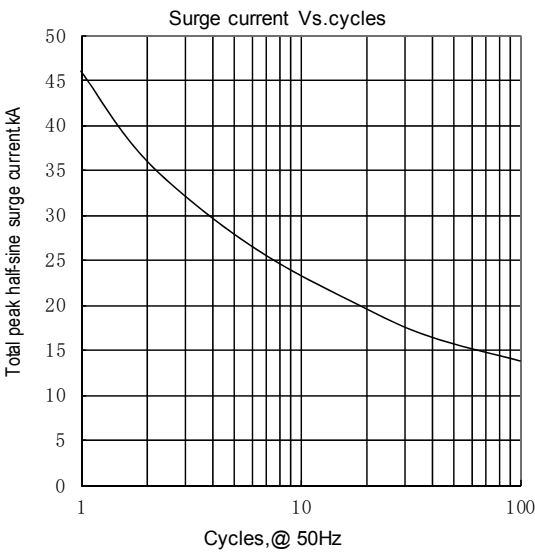


Fig.7

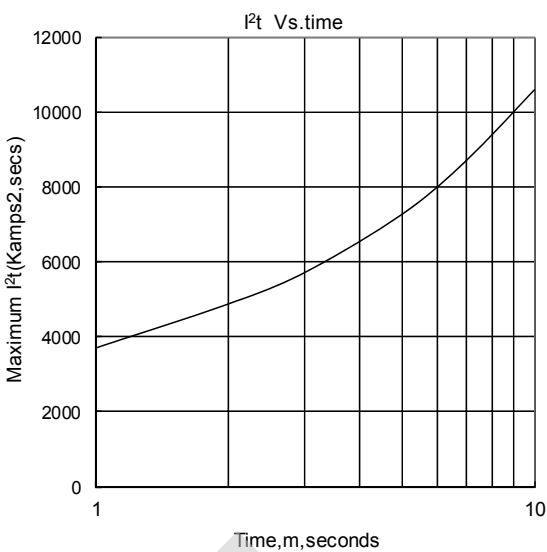
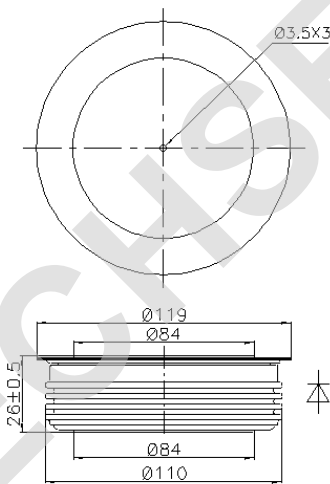


Fig.8

Outline:



TECHSEM reserves the right to change specifications without notice.