

**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. Y70ZPB-ZT60cT

$I_{F(AV)}$	5900A
V_{RRM}	200V 400V
	400V 600V
	800V 1000V

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, $T_C=85^\circ\text{C}$	190			5900	A
V_{RRM}	Repetitive peak reverse voltage	$t_p=10\text{ms}$	190	200		1000	V
I_{RRM}	Repetitive peak current	at V_{RRM}	190			100	mA
I_{FSM}	Surge forward current	10ms half sine wave	190			62	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				19220	$\text{A}^2\text{s} \times 10^3$
V_{FO}	Threshold voltage		190			0.630	V
r_F	Forward slope resistance					0.058	mΩ
V_{FM}	Peak on-state voltage	$I_{FM}=5000\text{A}$, $F=32\text{kN}$	25			1.28	V
Q_{rr}	Recovery charge	$I_{FM}=2000\text{A}$, $t_p=4000\mu\text{s}$, $di/dt=-20\text{A}/\mu\text{s}$, $V_R=100\text{V}$	190		4500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 35kN				0.012	C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.0035	
F_m	Mounting force			30		40	kN
T_{vj}	Junction temperature			-40		190	°C
T_{stg}	Stored temperature			-40		190	°C
W_t	Weight				880		g
Outline	ZT60cT						

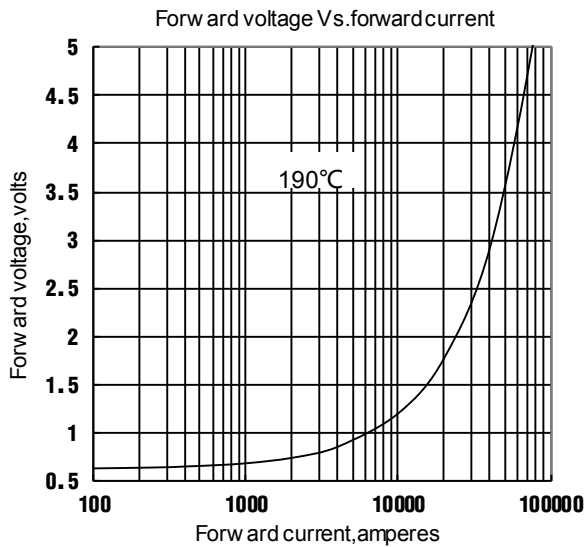


Fig.1

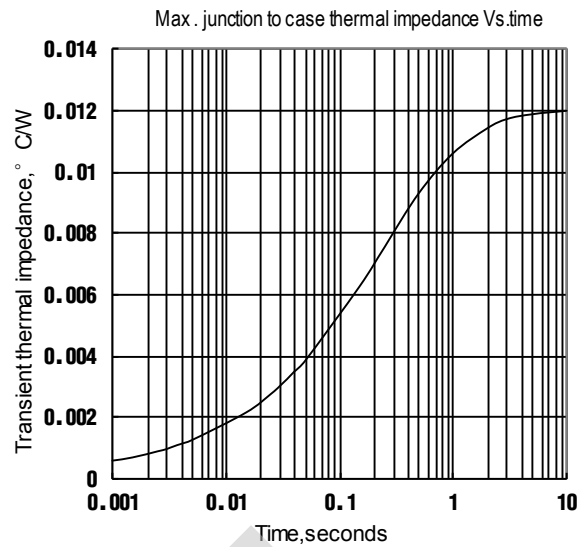


Fig.2

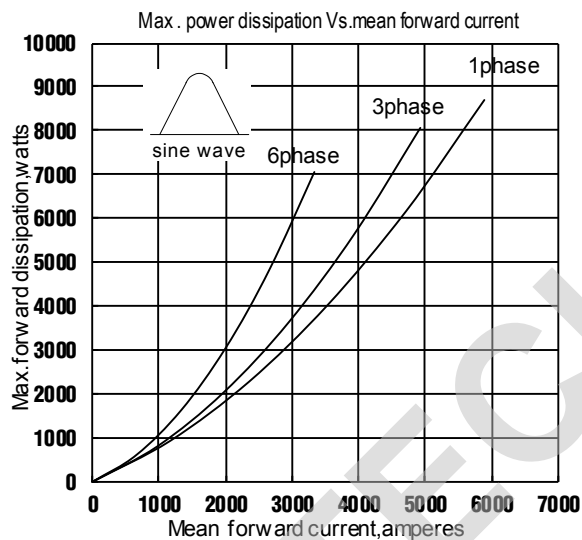


Fig.3

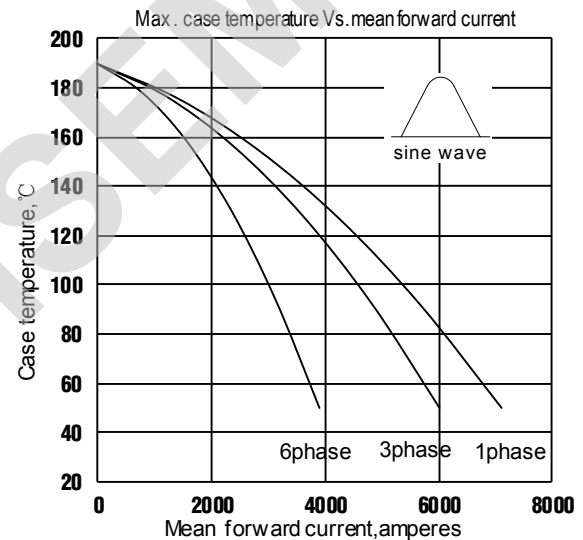


Fig.4

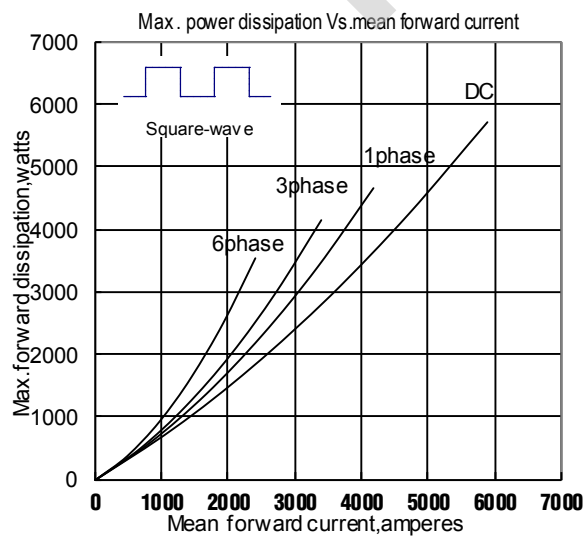


Fig.5

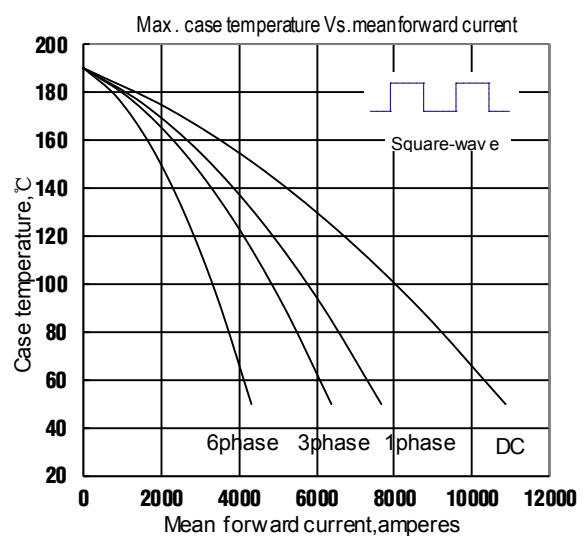


Fig.6

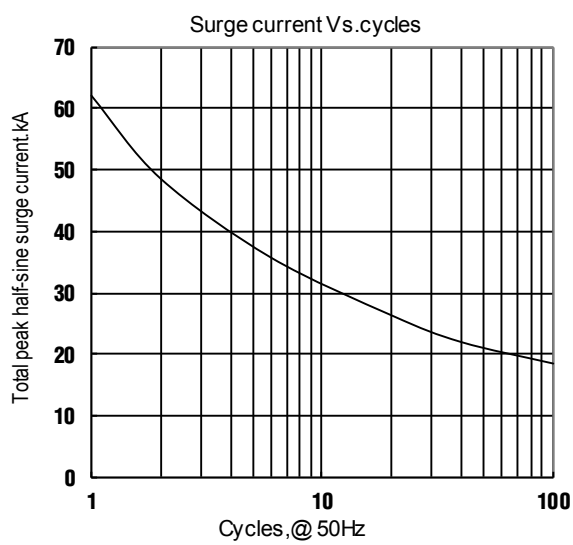


Fig.7

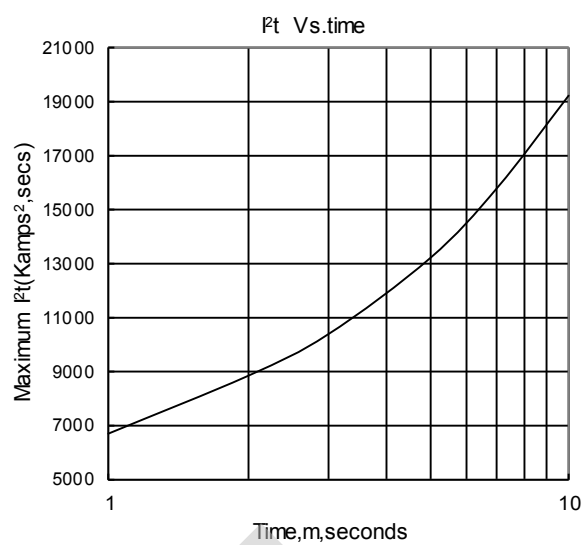
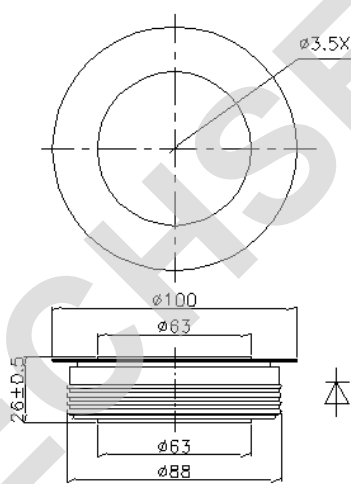


Fig.8

Outline:



TECHSEM reserves the right to change specifications without notice.