

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

$I_{F(AV)}$	3090 A
V_{RRM}	3100~3800 V
I_{FSM}	35 kA
I^2t	6125 10³A²S



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,	$T_c=55^{\circ}C$			3820	A
			$T_c=85^{\circ}C$			3090	
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms $V_{RSM}=V_{RRM}+100V$	160	3100		3800	V
I_{RRM}	Repetitive peak current	$V_{RM}=V_{RRM}$	160			160	mA
I_{FSM}	Surge forward current	10ms half sine wave	160			35	kA
I^2t	I^2T for fusing coordination	$V_R=0.6V_{RRM}$				6125	A ² s*10 ³
V_{FO}	Threshold voltage		160			0.88	V
r_F	Forward slop resistance					0.15	mΩ
V_{FM}	Peak on-state voltage	$I_{FM}=4000A, F=35kN$	160			1.48	V
Q_{rr}	Recovery charge	$I_{FM}=2000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$	160		5700		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					0.003	
F_m	Mounting force			30		40	kN
T_{stg}	Stored temperature			-40		160	°C
W_t	Weight				880		g
Outline	ZT60cT70						

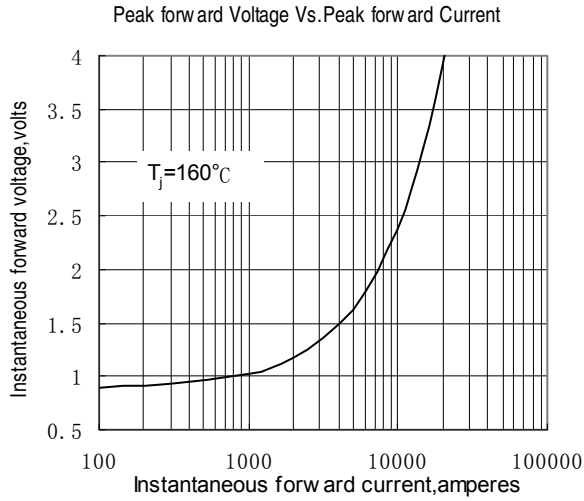


Fig.1

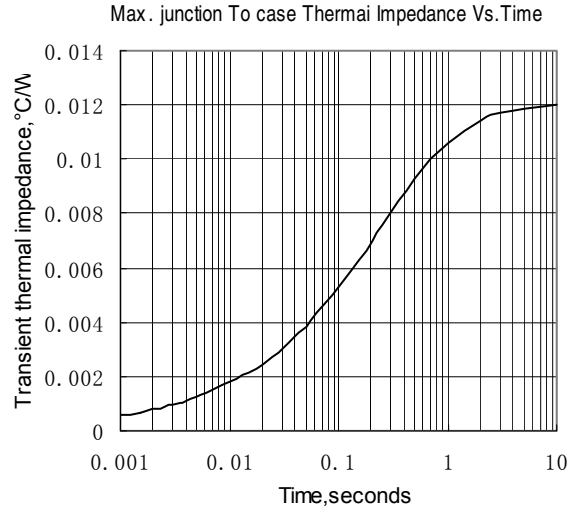


Fig.2

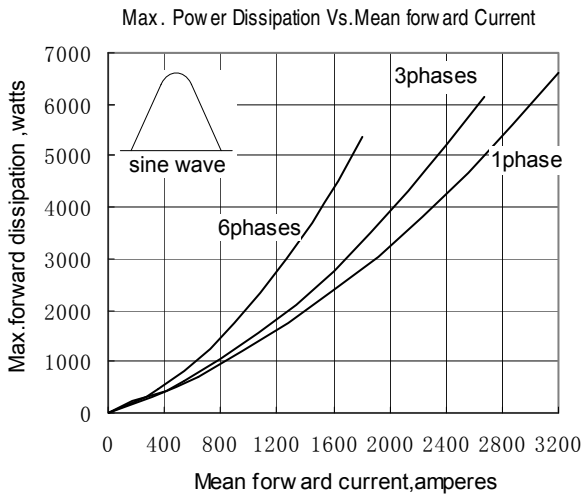


Fig.3

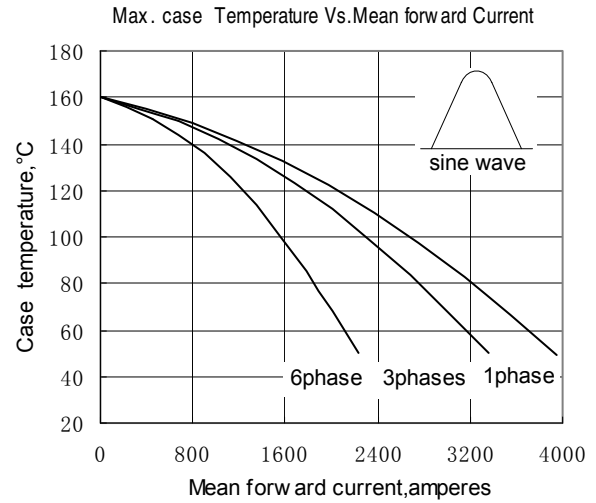


Fig.4

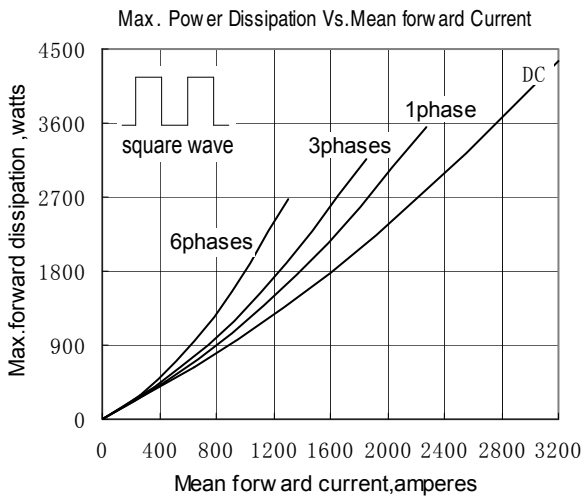


Fig.5

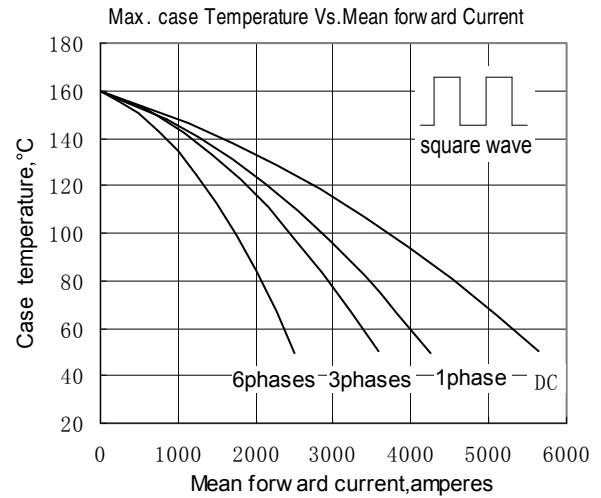


Fig.6

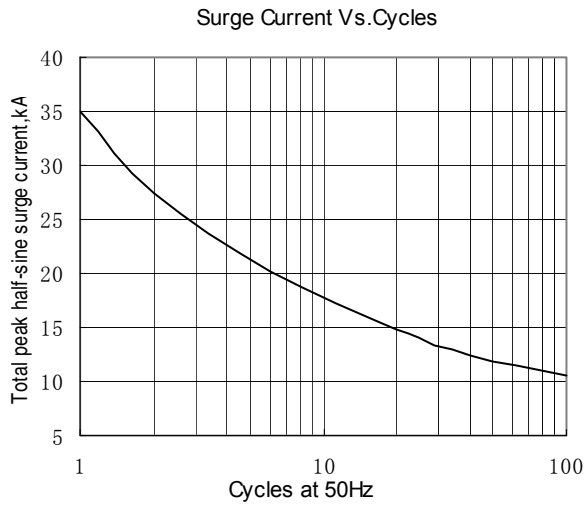


Fig.7

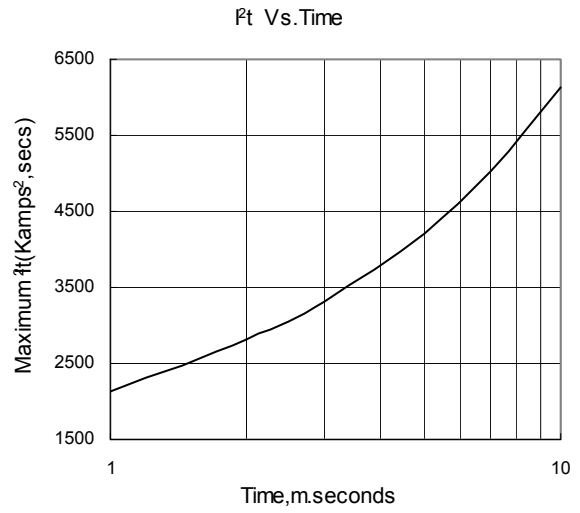


Fig.8

Outline:

