

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

$I_{F(AV)}$	670 A
V_{RRM}	1100~2000 V
I_{FSM}	5 kA
I^2t	125 10³A²S



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,	175			670	A
						560	
V _{RRM}	Repetitive peak reverse voltage	V _{RRM} tp=10ms V _{RSM} = V _{RRM} +100V	175	1100		2000	V
I _{RRM}	Repetitive peak current	V _{RM} = V _{RRM}	175			16	mA
I _{FSM}	Surge forward current	10ms half sine wave	175			5	kA
I ² t	I ² T for fusing coordination	V _R =0.6V _{RRM}					125
V _{FO}	Threshold voltage		175			0.8	V
r _F	Forward slop resistance						0.86
V _{FM}	Peak on-state voltage	I _{FM} =1500A, F=5kN	175			2.10	V
Q _{rr}	Recovery charge	I _{FM} =1000A, tp=2000μs, di/dt=-20A/μs, V _R =50V	175		1400		μC
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 5.0kN				0.080	°C /W
R _{th(c-h)}	Thermal resistance case to heat sink					0.020	
F _m	Mounting force			3.3		5.5	kN
T _{stg}	Stored temperature			-40		175	°C
W _t	Weight				60		g
Outline	ZT19aT						

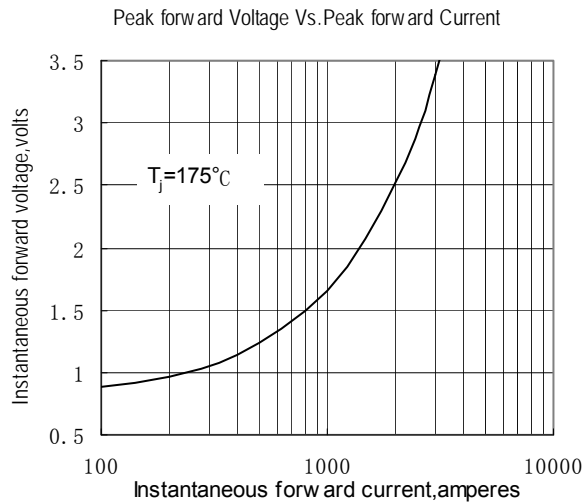


Fig.1

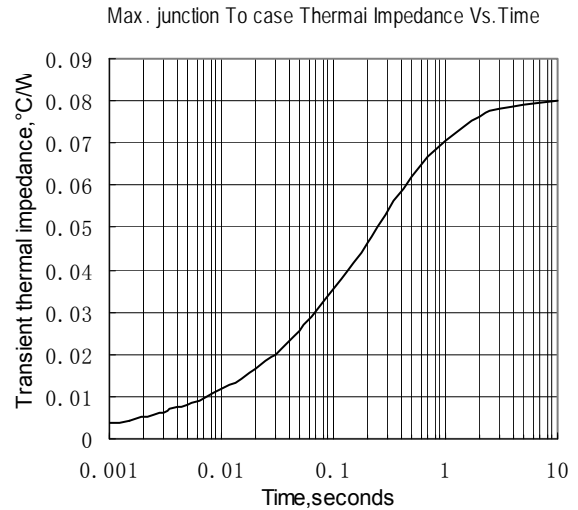


Fig.2

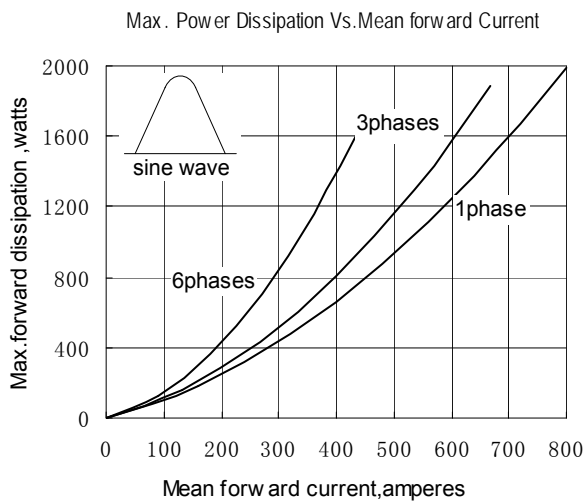


Fig.3

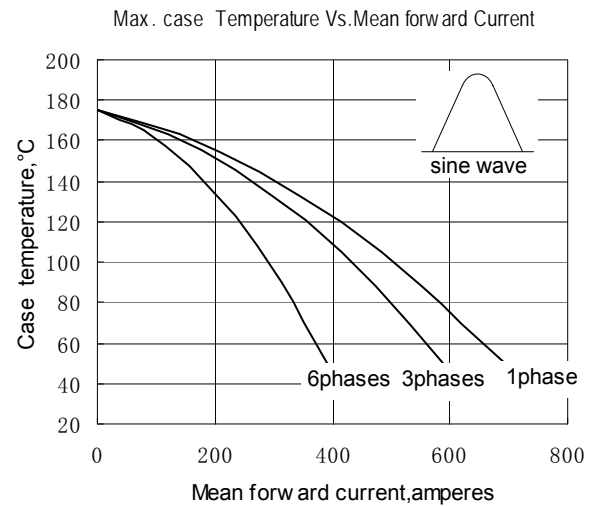


Fig.4

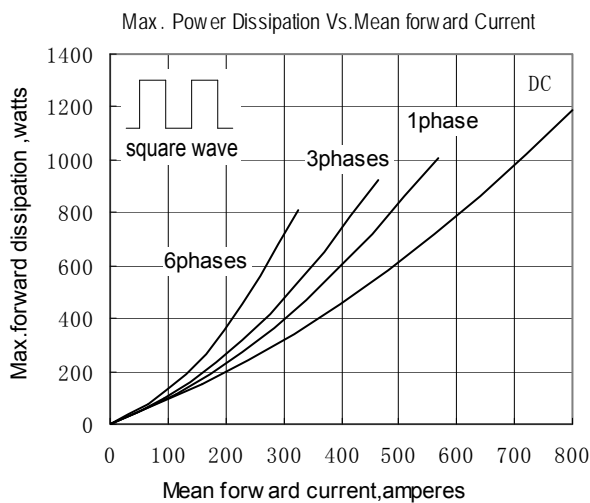


Fig.5

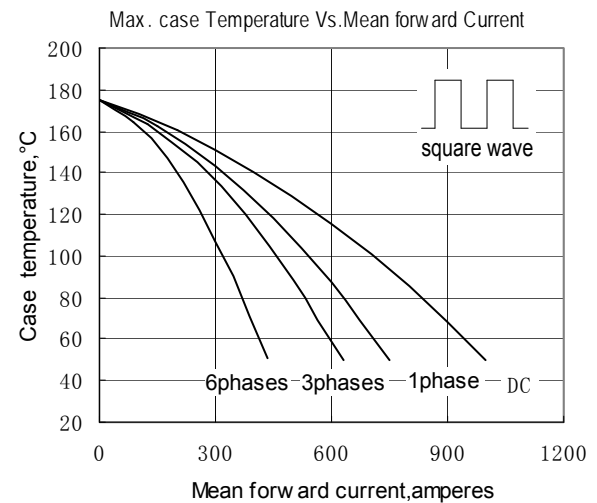


Fig.6

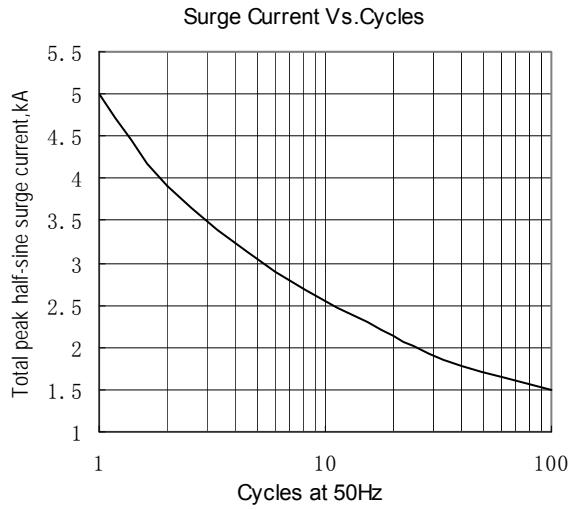


Fig.7

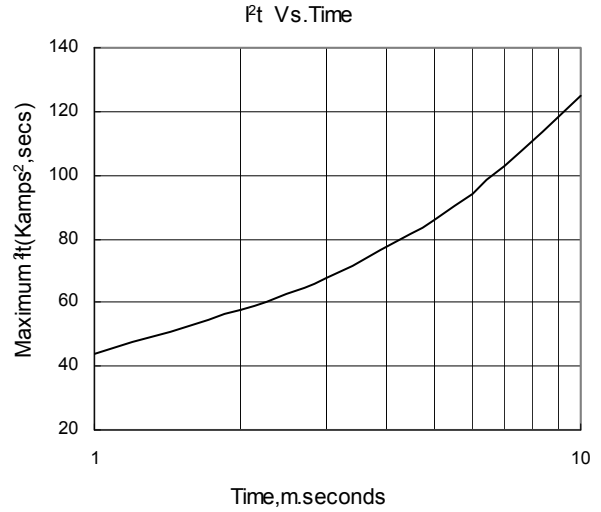


Fig.8

Outline:

