

### 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

$I_{F(AV)}$	<b>500 A</b>
$V_{RRM}$	<b>5600~6500 V</b>
$I_{FSM}$	<b>9.5 kA</b>
$I^2t$	<b>451 10<sup>3</sup>A<sup>2</sup>S</b>



SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T <sub>j</sub> (°C)	VALUE			UNIT
					Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,	T <sub>C</sub> =100°C	150			500	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms		150	5600		6500	V
$I_{RRM}$	Repetitive peak current	at V <sub>RRM</sub>		150			50	mA
$I_{FSM}$	Surge forward current	10ms half sine wave		150			9.5	kA
$I^2t$	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>					451	A <sup>2</sup> s*10 <sup>3</sup>
$V_{FO}$	Threshold voltage			150			0.89	V
$r_F$	Forward slope resistance						1.05	mΩ
$V_{FM}$	Peak forward voltage	I <sub>FM</sub> =1000A, F=20kN		25			2.20	V
$Q_{rr}$	Recovery charge	I <sub>FM</sub> =1000A, tp=2000μs, di/dt=-5A/μs, V <sub>R</sub> =50V		150		2500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 20.0kN					0.045	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.008		
$F_m$	Mounting force				10	15	20	kN
$T_{stg}$	Stored temperature				-40		160	°C
$W_t$	Weight					340		g
Outline	ZT33cT / ZT33dT							

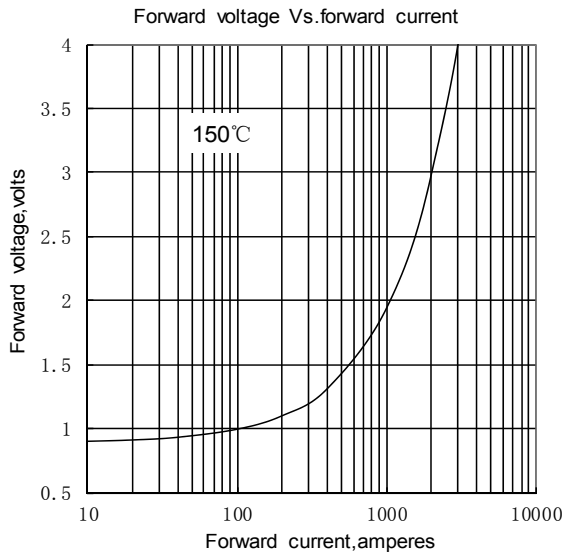


Fig.1

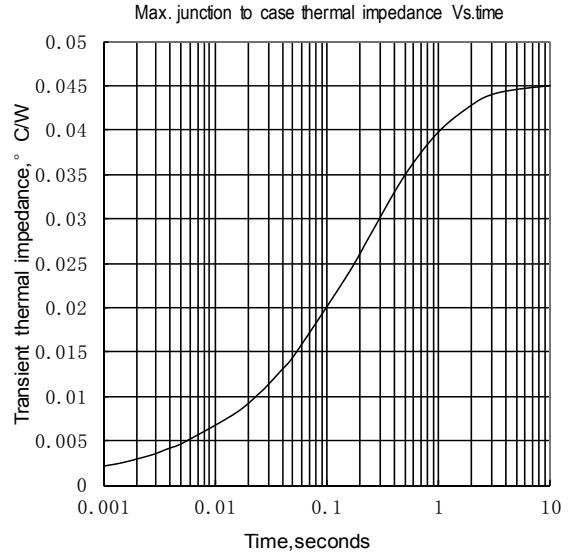


Fig.2

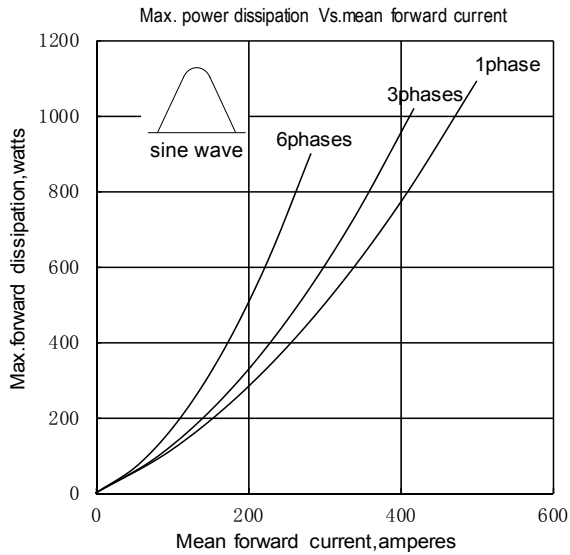


Fig.3

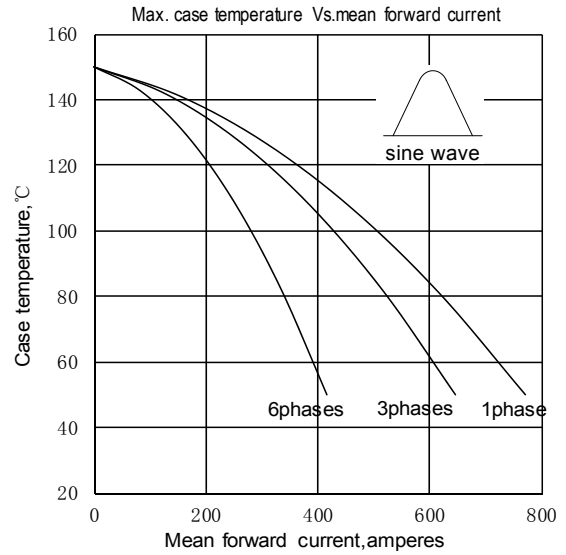


Fig.4

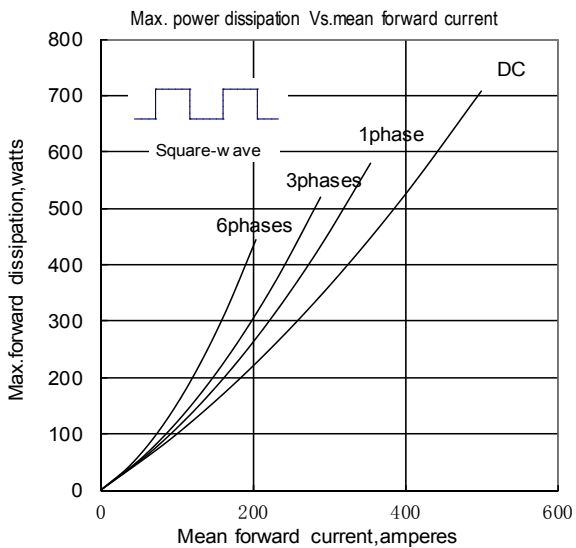


Fig.5

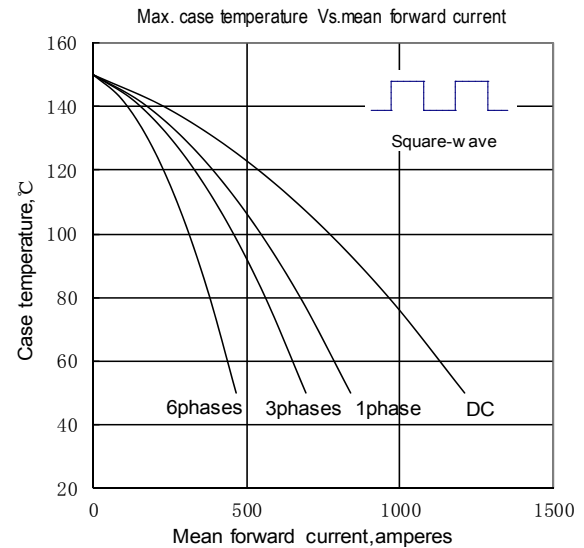


Fig.6

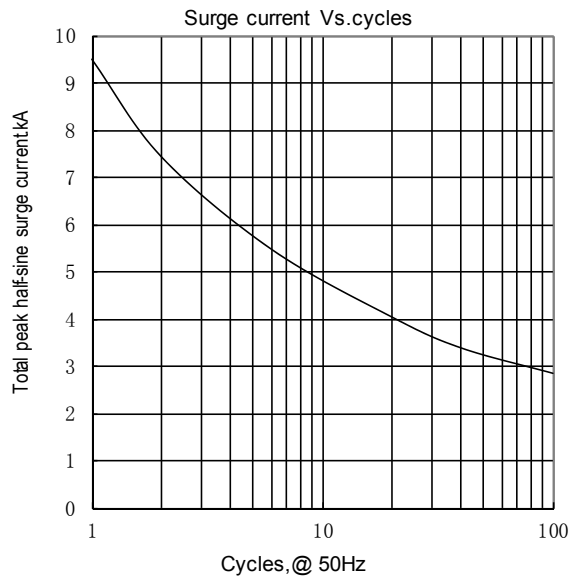


Fig.7

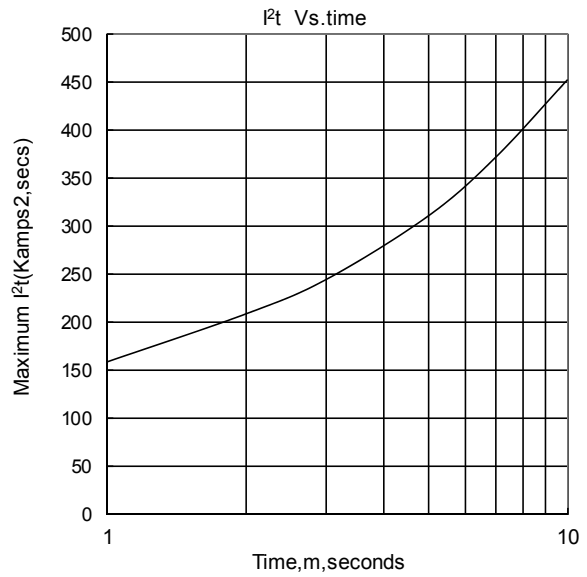


Fig.8

Outline:

