



**FEATURES**

- Low forward voltage drop
- High reverse voltage
- Hermetic metal cases with ceramic insulators

**APPLICATIONS**

- All purpose high power rectifier diodes
- High power resistance welding equipment
- Non-controllable and half-controllable rectifiers
- Controlled rectifiers

$I_{F(AV)}$	<b>1010 A</b>
$V_{RRM}$	<b>2100~3000 V</b>
$I_{FSM}$	<b>13 kA</b>
$I^2t$	<b>845 10<sup>3</sup>A<sup>2</sup>S</b>

**ELECTRICAL CHARACTERISTICS**

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT	
				Min	Type	Max		
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Double side cooled,	T <sub>C</sub> =55°C	160			1250	A
			T <sub>C</sub> =85°C				1010	
V <sub>RRM</sub>	Repetitive peak reverse voltage	V <sub>RRM</sub> tp=10ms V <sub>RSM</sub> = V <sub>RRM</sub> +100V	160	2100		3000	V	
I <sub>RRM</sub>	Repetitive peak current	V <sub>RM</sub> = V <sub>RRM</sub>	160			40	mA	
I <sub>FSM</sub>	Surge forward current	10ms half sine wave	160			13	kA	
I <sup>2</sup> t	I <sup>2</sup> T for fusing coordination	V <sub>R</sub> =0.6V <sub>RRM</sub>				845	A <sup>2</sup> s*10 <sup>3</sup>	
V <sub>FO</sub>	Threshold voltage		160			0.88	V	
r <sub>F</sub>	Forward slop resistance					0.49	mΩ	
V <sub>FM</sub>	Peak on-state voltage	I <sub>FM</sub> =1800A, F=15kN	160			1.37	V	
Q <sub>rr</sub>	Recovery charge	I <sub>FM</sub> =2000A, tp=2000μs, di/dt=-20A/μs, V <sub>R</sub> =50V	160		2000		μC	
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 15.0kN				0.035	°C / W	
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink					0.010		
F <sub>m</sub>	Mounting force			10		20	kN	
T <sub>stg</sub>	Stored temperature			-40		160	°C	
W <sub>t</sub>	Weight					250	g	
Outline	ZT33cT							



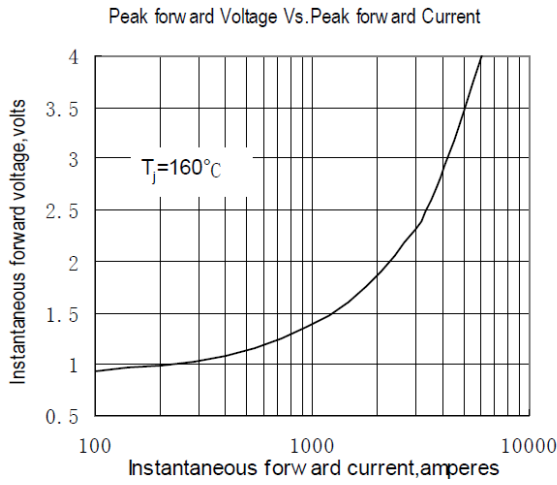


Fig.1

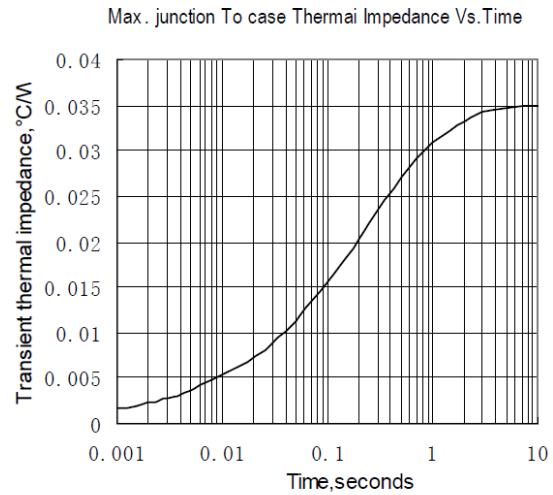


Fig.2

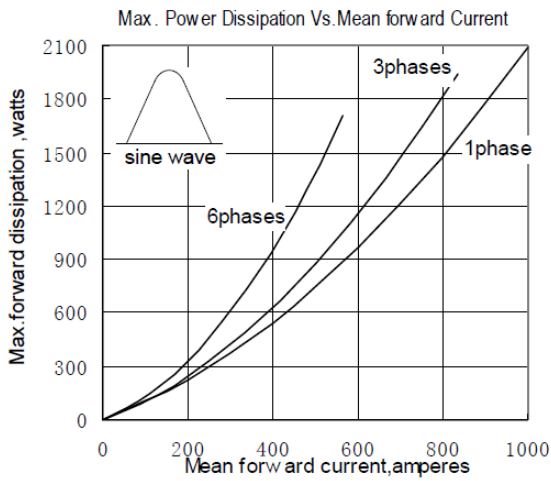


Fig.3

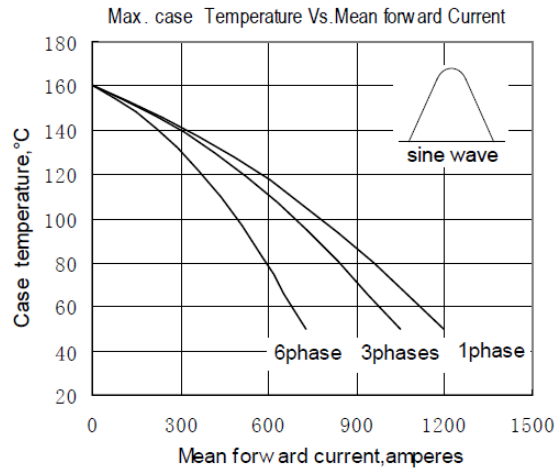


Fig.4

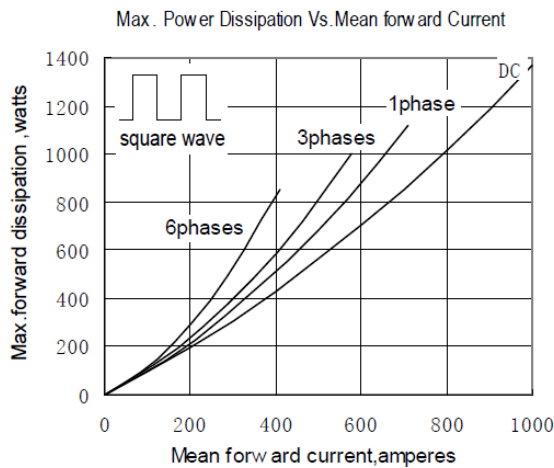


Fig.5

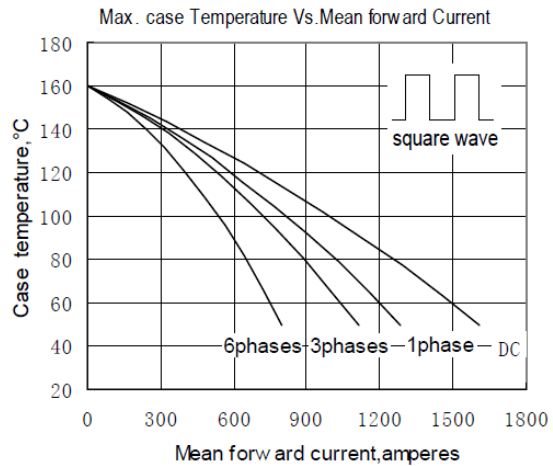


Fig.6

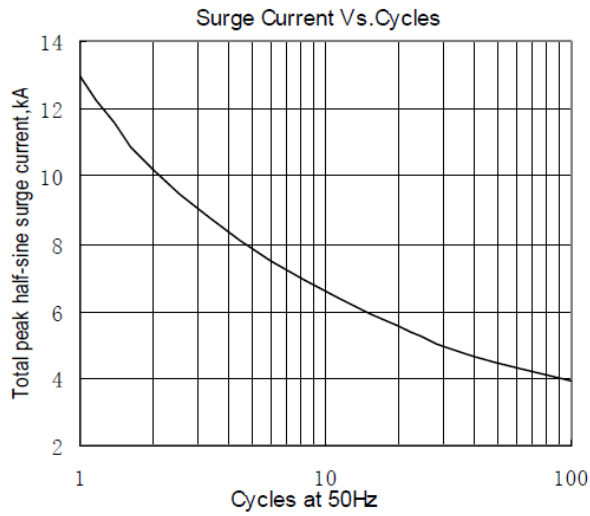


Fig.7

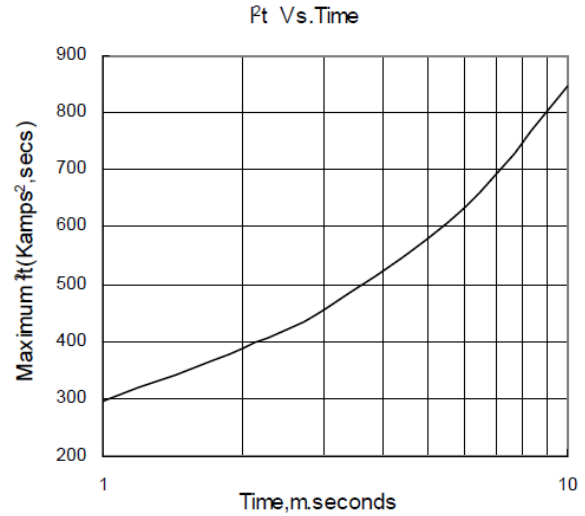


Fig.8

