

**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

**$I_{F(AV)}$             1770 A**  
 **$V_{RRM}$              3100~4200 V**  
 **$I_{FSM}$               18 kA**  
 **$I^2t$                  1620 10<sup>3</sup>A<sup>2</sup>S**



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> =85°C	160			1770	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms		160	3100		4200	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$		160			80	mA
$I_{FSM}$	Surge forward current	10ms half sine wave		160			18	kA
$I^2t$	$I^2t$ for fusing coordination	$V_R=0.6V_{RRM}$					1620	A <sup>2</sup> s*10 <sup>3</sup>
$V_{FO}$	Threshold voltage			160			0.98	V
$r_F$	Forward slope resistance						0.26	mΩ
$V_{FM}$	Peak forward voltage	$I_{FM}=3800A, F=24kN$		160			1.97	V
$Q_{rr}$	Recovery charge	$I_{FM}=2000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$		160		3500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine double side cooled Clamping force 24kN					0.020	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.005	
$F_m$	Mounting force				19		26	kN
$T_{stg}$	Stored temperature				-40		160	°C
$W_t$	Weight					440		g
Outline								

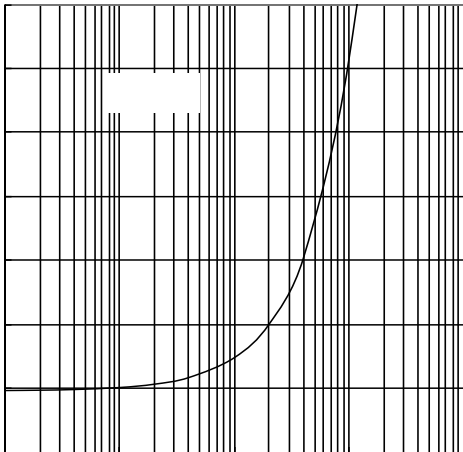


Fig.1

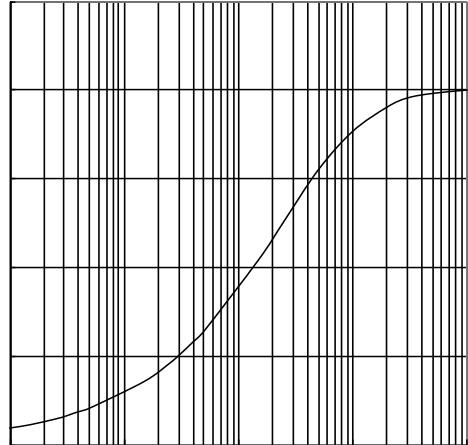


Fig.2

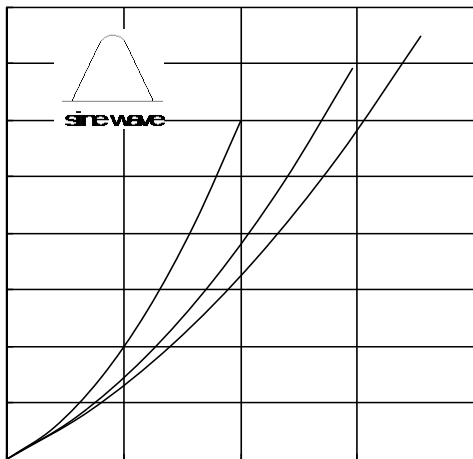


Fig.3

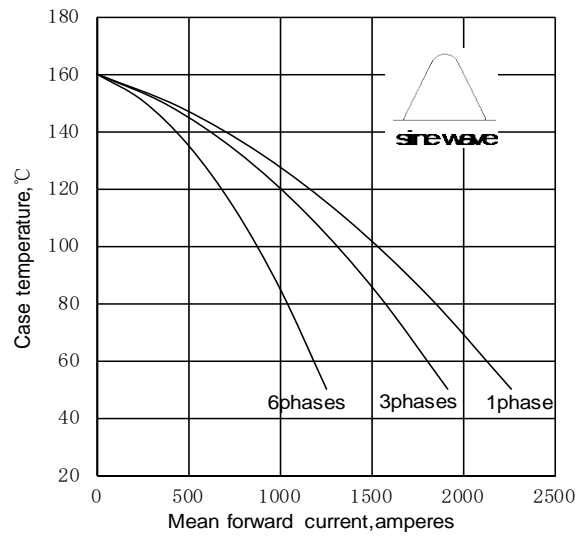


Fig.4

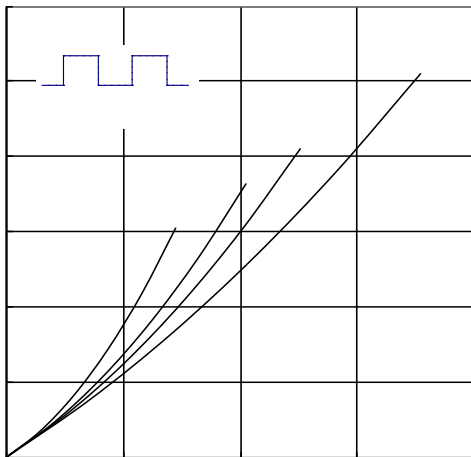


Fig.5

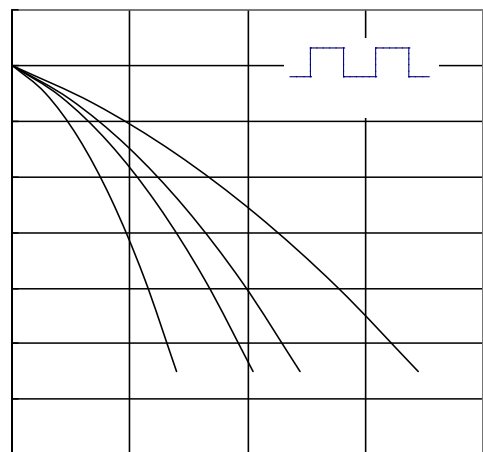
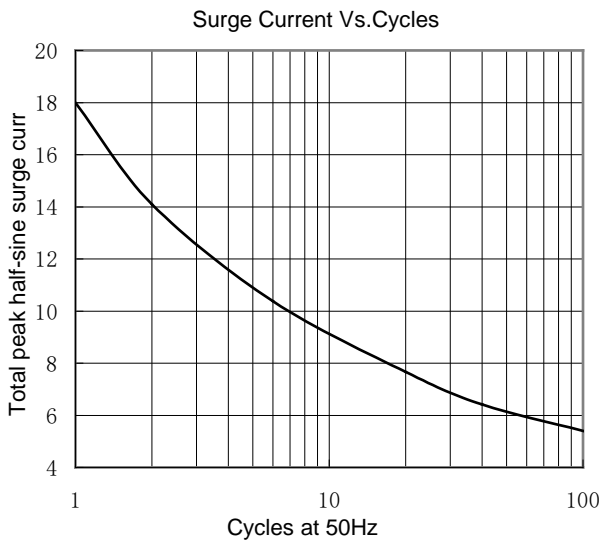
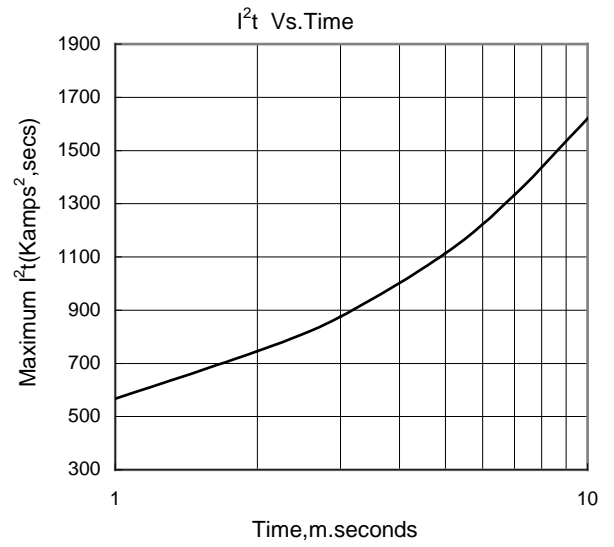


Fig.6



**Fig.7**



**Fig.8**

**Outline:**

