

#### 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

**$I_{F(AV)}$  5630A**  
 **$V_{RRM}$  200 ~ 1000V**  
 **$I_{FSM}$  58 kA**  
 **$I^2t$  16820 10<sup>3</sup>A<sup>2</sup>S**

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,	$T_C=85^{\circ}C$	190			5630	A
$V_{RRM}$	Repetitive peak reverse voltage	tp=10ms		190	200		1000	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$		190			100	mA
$I_{FSM}$	Surge forward current	10ms half sine wave		190			58	kA
$I^2t$	$I^2t$ for fusing coordination	$V_R=0.6V_{RRM}$					16820	A <sup>2</sup> s*10 <sup>3</sup>
$V_{FO}$	Threshold voltage			190			0.63	V
$r_F$	Forward slope resistance						0.058	mΩ
$V_{FM}$	Peak on-state voltage	$I_{FM}=5000A, F=32kN$		25			1.32	V
$Q_{rr}$	Recovery charge	$I_{FM}=2000A, tp=4000\mu s, di/dt=-20A/\mu s, V_R=100V$		190		4500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. double side cooled Clamping force 32kN					0.013	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink						0.0035	
$F_m$	Mounting force				27		34	kN
$T_{vj}$	Junction temperature				-40		190	°C
$T_{stg}$	Stored temperature				-40		190	°C
$W_t$	Weight					820		g
Outline	P44a							

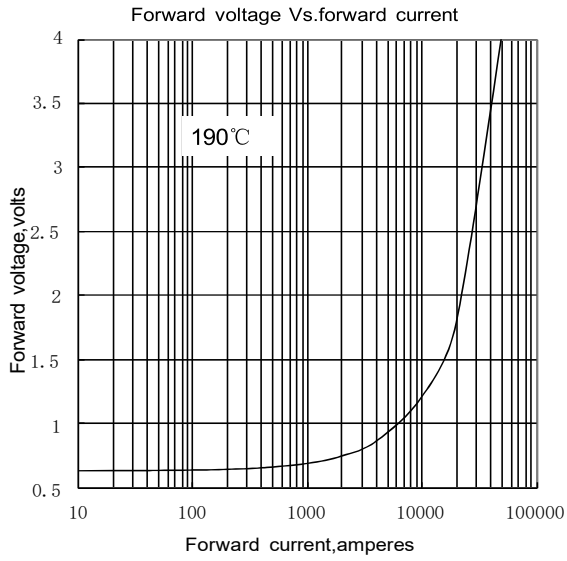


Fig.1

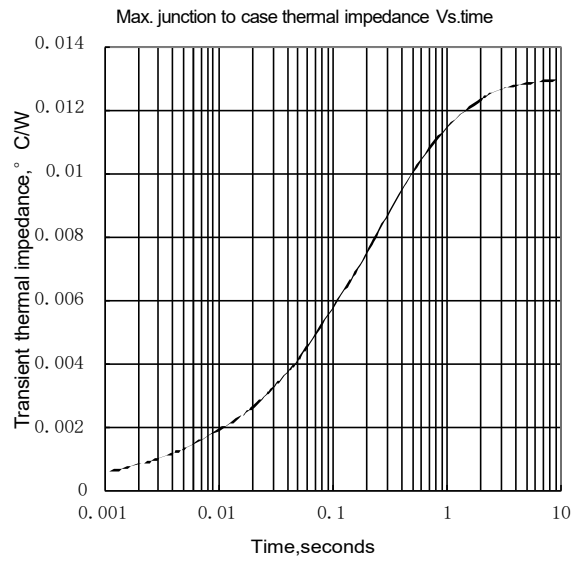


Fig.2

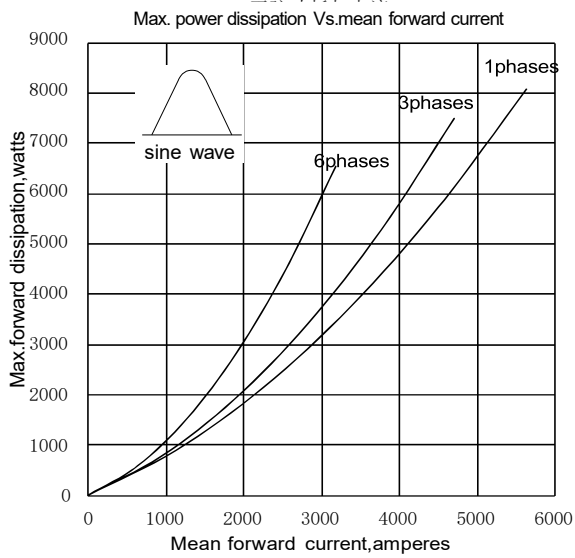


Fig.3

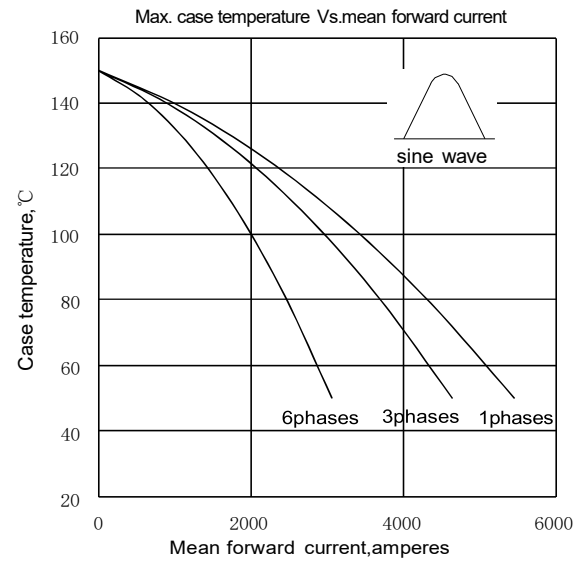


Fig.4

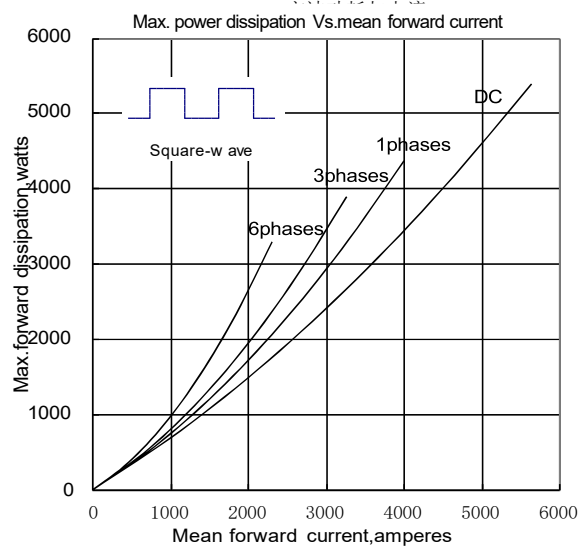


Fig.5

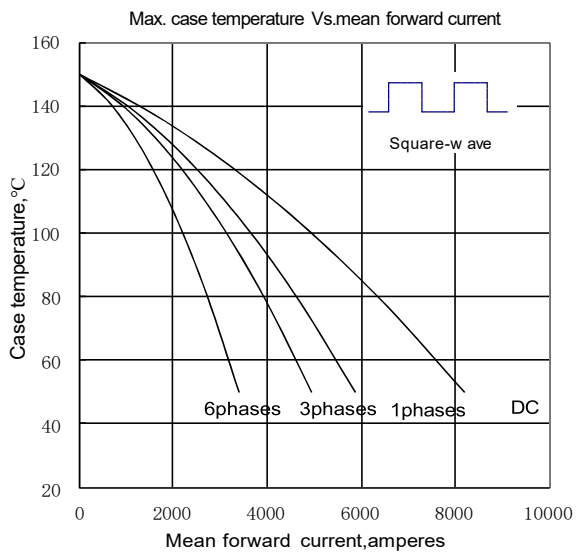


Fig.6

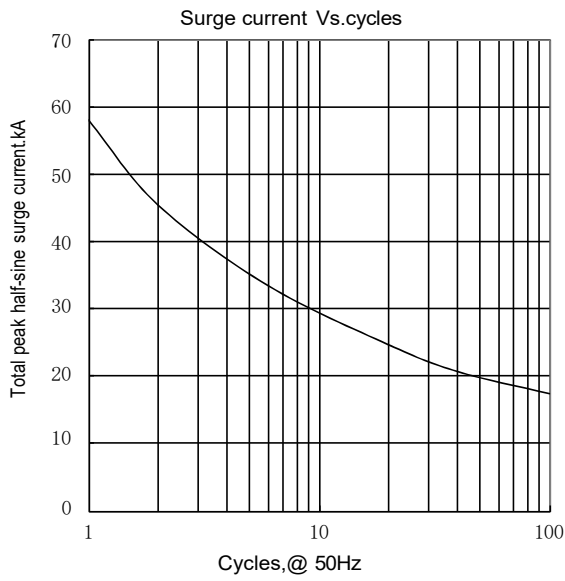


Fig.7

Outline:

