

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

$I_{F(AV)}$ 400 A
 V_{RRM} 8000 ~ 8500V
 I_{FSM} 6 kA
 I^2t 180 10³A²S

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		$T_j(^{\circ}\text{C})$	VALUE			UNIT
					Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled	$T_c=85^{\circ}\text{C}$	150			400	A
V_{RRM}	Repetitive peak reverse voltage	$t_p=10\text{ms}$		150	8000		8500	V
I_{RRM}	Repetitive peak current	at V_{RRM} $t_p=10\text{ms}$		150			50	mA
I_{FSM}	Surge forward current	10ms half sine wave. $V_R=0.6V_{RRM}$		150			6.0	kA
I^2t	I^2t for fusing coordination						180	10 ³ A ² s
V_{FO}	Threshold voltage			150			1.40	V
r_F	Forward slope resistance						2.20	mΩ
V_{FM}	Peak forward voltage	$I_{FM}=1000\text{A}$, $F=24\text{kN}$		25			2.55	V
Q_{rr}	Recovery charge	$I_{FM}=1000\text{A}$, $t_p=4000\mu\text{s}$, $di/dt=-20\text{A}/\mu\text{s}$, $V_R=100\text{V}$		150		2500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. double side cooled Clamping force 15kN					0.045	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.008		
F_m	Mounting force				10		20	kN
T_{vj}	Junction temperature				-40		150	°C
T_{stg}	Stored temperature				-40		160	°C
W_t	Weight					300		g
Outline	P50							

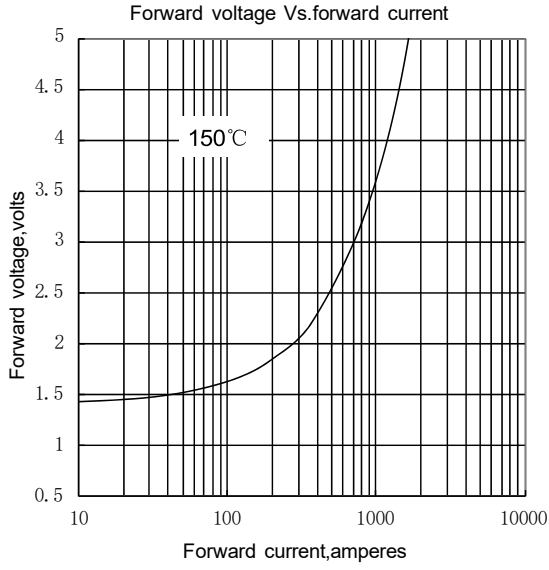


Fig.1

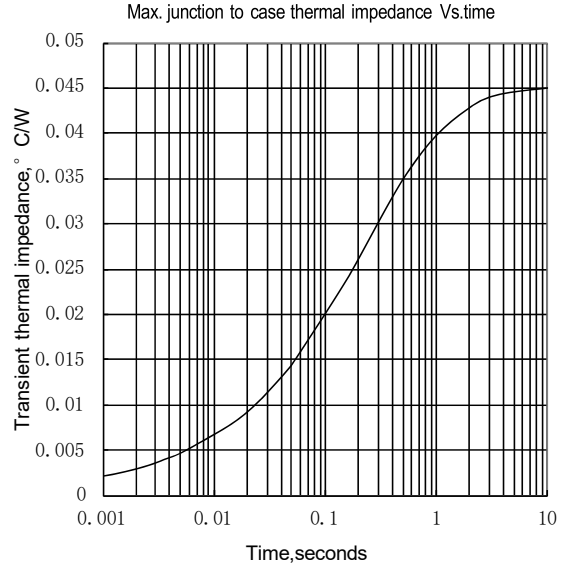


Fig.2

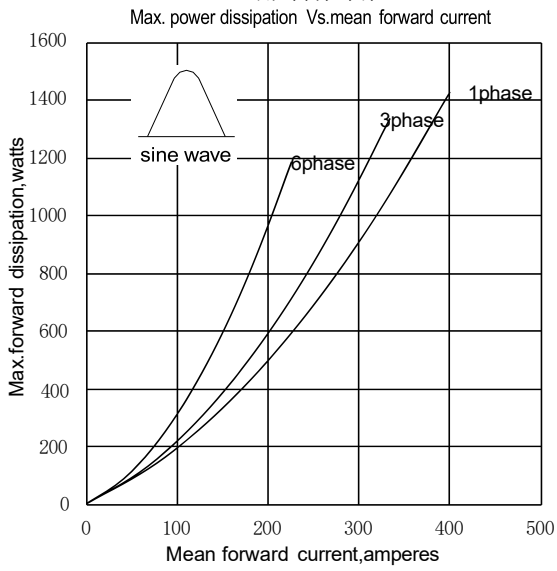


Fig.3

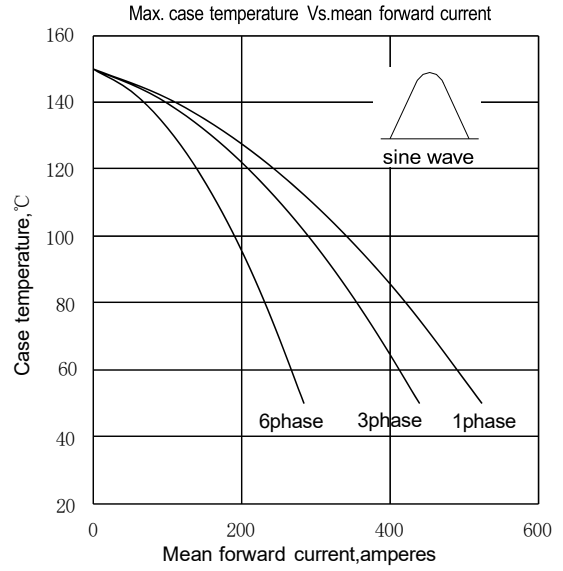


Fig.4

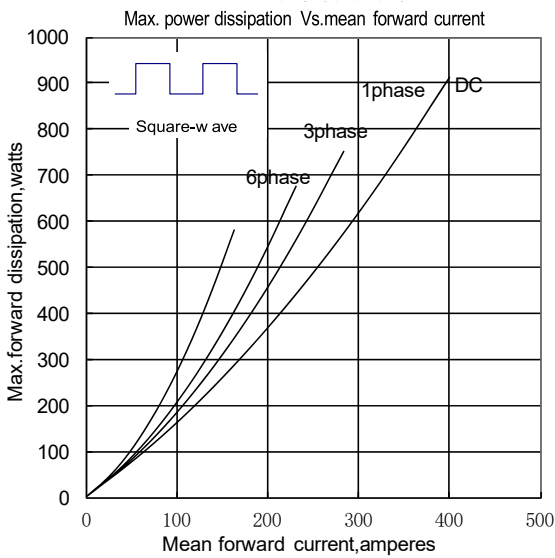


Fig.5

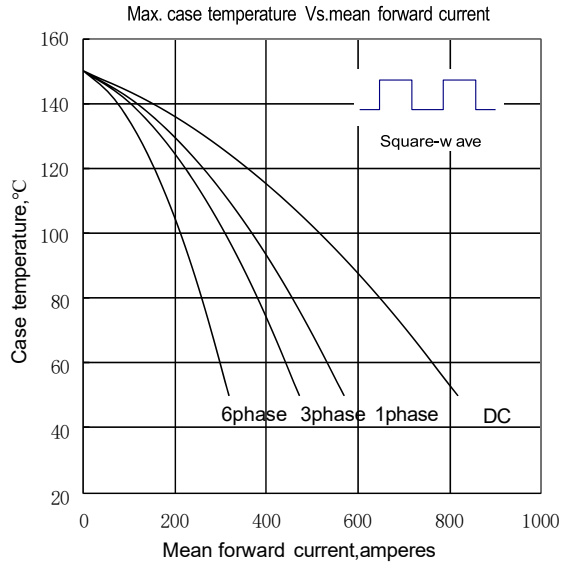


Fig.6

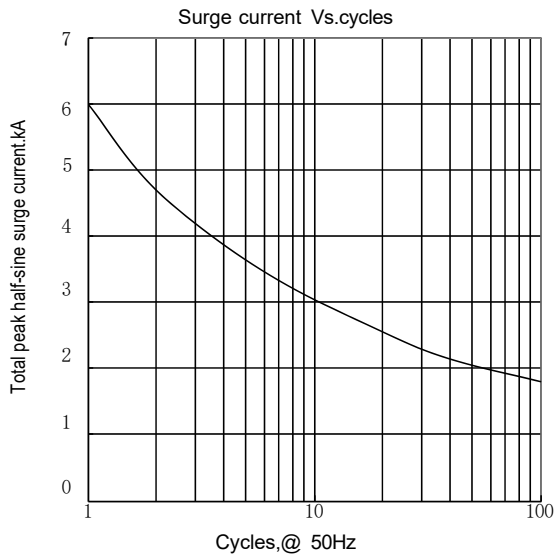


Fig.7

Outline:

