

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

$I_{F(AV)}$	6490A
V_{RRM}	3100~4200 V
I_{FSM}	80 kA
I^2t	32000 10³A²S



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled, T _C =85°C	160			6490	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms	160	3100		4200	V
I_{RRM}	Repetitive peak current	at V_{RRM}	160			250	mA
I_{FSM}	Surge forward current	10ms half sine wave	160			80	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				32000	A ² s*10 ³
V_{FO}	Threshold voltage		160			0.92	V
r_F	Forward slope resistance					0.087	mΩ
V_{FM}	Peak forward voltage	$I_{FM}=6000A, F=90kN$	160			1.44	V
Q_{rr}	Recovery charge	$I_{FM}=2000A, tp=2000\mu s, di/dt=-20A/\mu s, V_R=50V$	160		9000		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	DC: double side cooled Clamping force 90kN				0.005	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.0015	
F_m	Mounting force			81		108	kN
T_{stg}	Stored temperature			-40		160	°C
W_t	Weight				2000		g
Outline	P48						

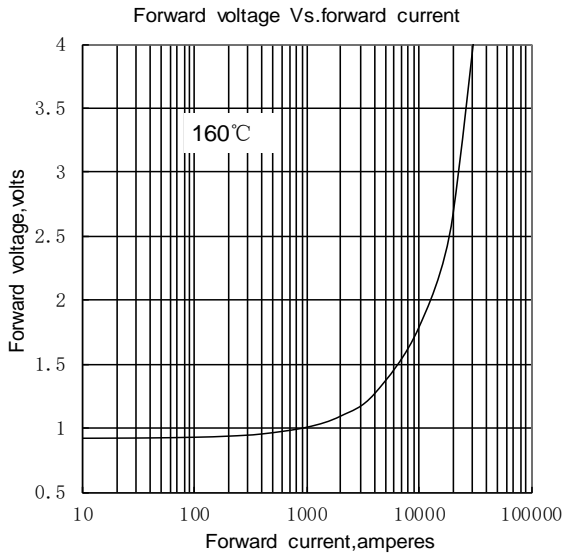


Fig.1

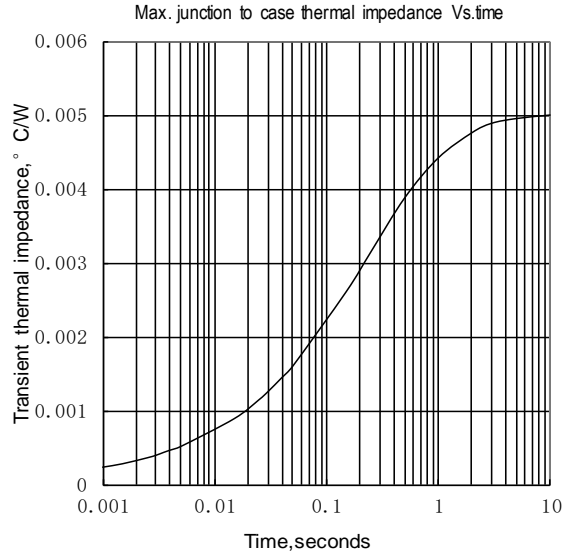


Fig.2

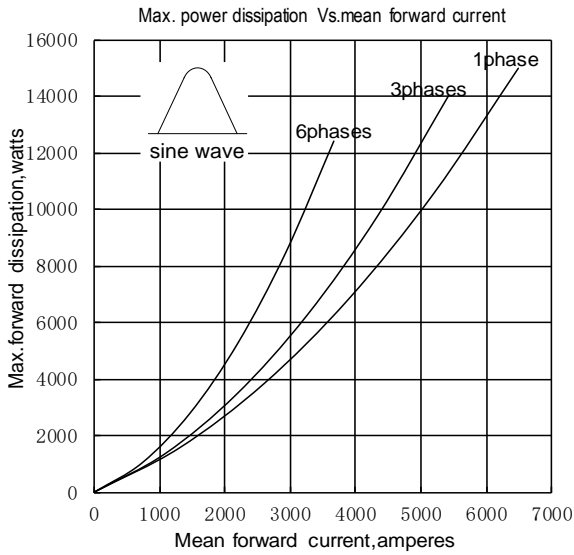


Fig.3

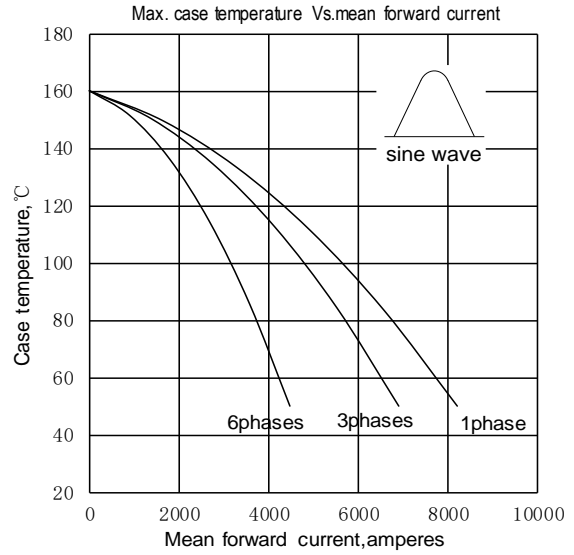


Fig.4

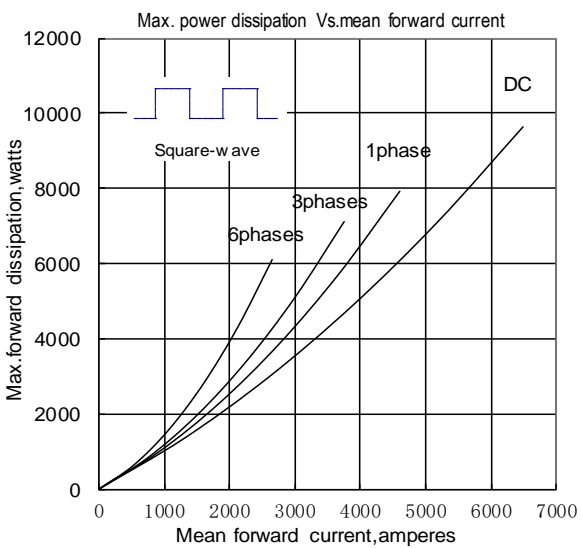


Fig.5

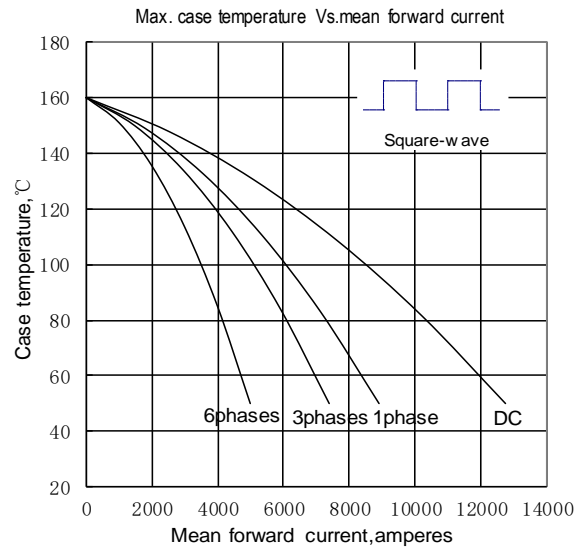


Fig.6

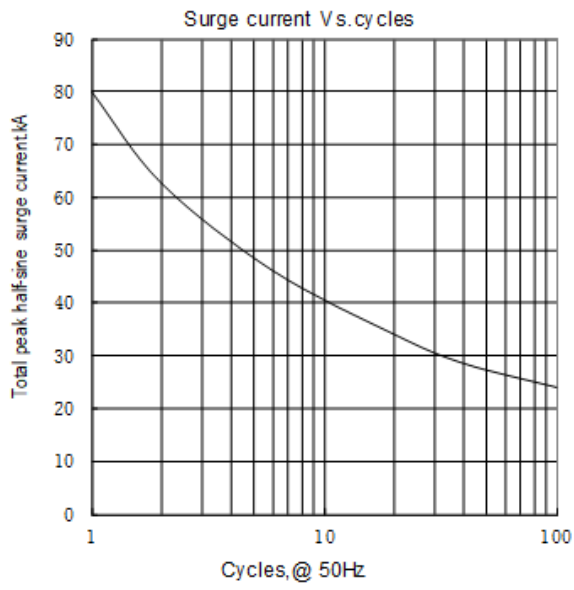
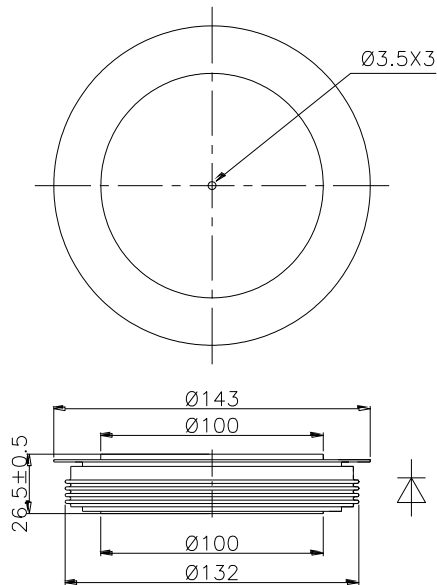


Fig.7



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