

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

$I_{F(AV)}$ 5220A
 V_{RRM} 1100~2000 V
 I_{FSM} 56.4 kA
 I^2t 15904 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				5220	A
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms $V_{RSM} = V_{RRM} + 100V$	175	1100		2000	V
I_{RRM}	Repetitive peak current	at V_{RRM}	175			200	mA
I_{FSM}	Surge forward current	10ms half sine wave	175			56.4	kA
I^2t	I^2t for fusing coordination	$V_R = 0.6V_{RRM}$				15904	A ² s*10 ³
V_{FO}	Threshold voltage		175			0.84	V
r_F	Forward slope resistance					0.069	mΩ
V_{FM}	Peak forward voltage	$I_{FM} = 6800A, F = 40kN$	175			1.31	V
Q_{rr}	Recovery charge	$I_{FM} = 2000A, tp = 2000\mu s, di/dt = -20A/\mu s, V_R = 50V$	175		5500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	DC· double side cooled				0.010	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink	Clamping force 40kN				0.003	
F_m	Mounting force			35		47	kN
T_{stg}	Stored temperature			-40		175	°C
W_t	Weight				1100		g
Outline	P46						

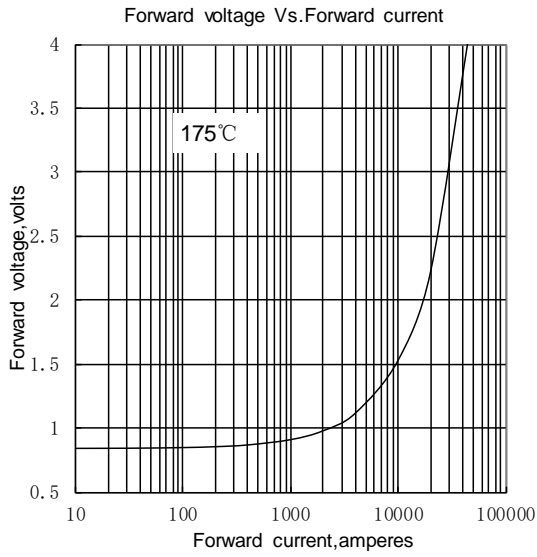


Fig.1

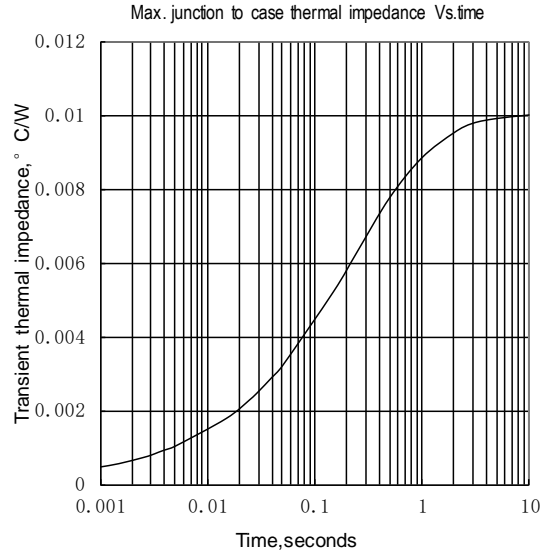


Fig.2

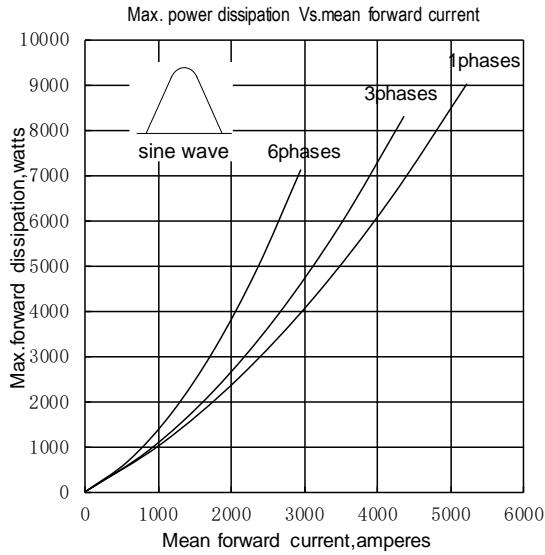


Fig.3

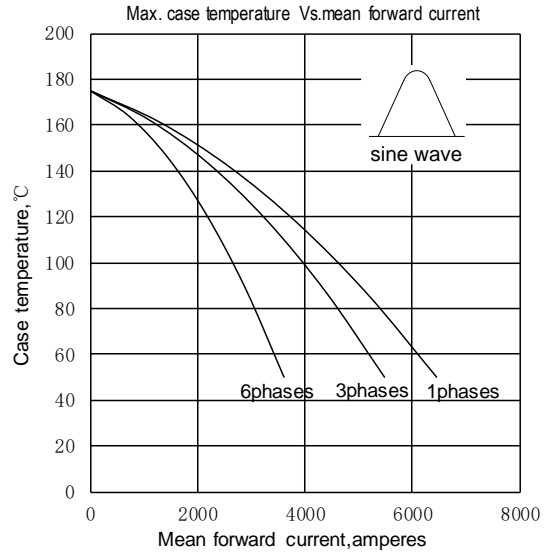


Fig.4

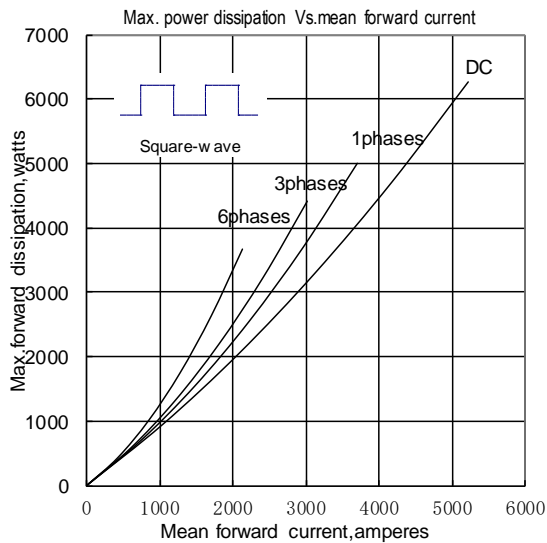


Fig.5

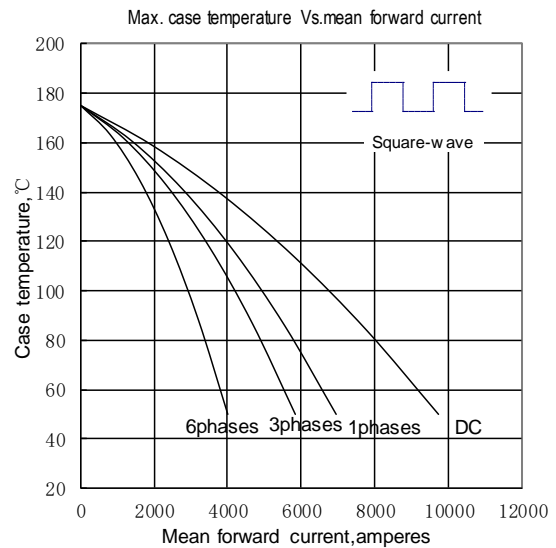


Fig.6

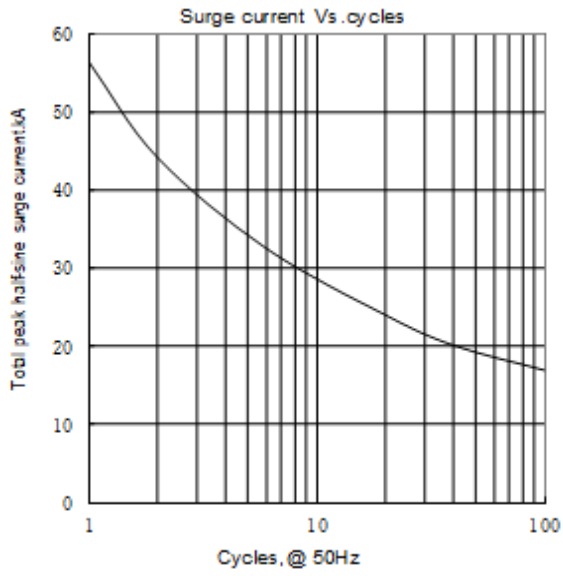
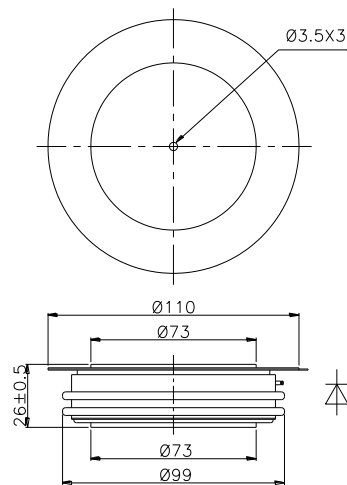


Fig.7



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