

Features

- Low forward voltage drop
- High reverse voltage
- Hermetic metal cases with ceramic insulators

$I_{F(AV)}$	500A
V_{RRM}	5600 ~ 6500V
I_{FSM}	9.5 kA
I^2t	451 10³A²S

Typical Applications

- All purpose high power rectifier diodes
- High power resistance welding equipment
- Non-controllable and half-controllable rectifiers
- Controlled rectifiers

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 =100°C	150			500	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms	150	5600		6500	V
I_{RRM}	Repetitive peak current	at V _{RRM}	150			50	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			9.5	kA
I^2t	I ² t for fusing coordination	V _R =0.6V _{RRM}				451	A ² s*10 ³
V_{FO}	Threshold voltage		150			0.89	V
r_F	Forward slope resistance					1.05	mΩ
V_{FM}	Peak forward voltage	I _{FM} =1000A, F=20kN	25			2.20	V
Q_{rr}	Recovery charge	I _{FM} =1000A, tp=4000μs, di/dt=-5A/μs, V _R =100V	150		2500		μC
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Double side cooled Clamping force 20.0kN				0.045	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.008	
F_m	Mounting force			10	15	20	kN
T_{vj}	Junction temperature			-40		150	°C
T_{stg}	Stored temperature			-40		160	°C
W_t	Weight				340		g
Outline	P39						

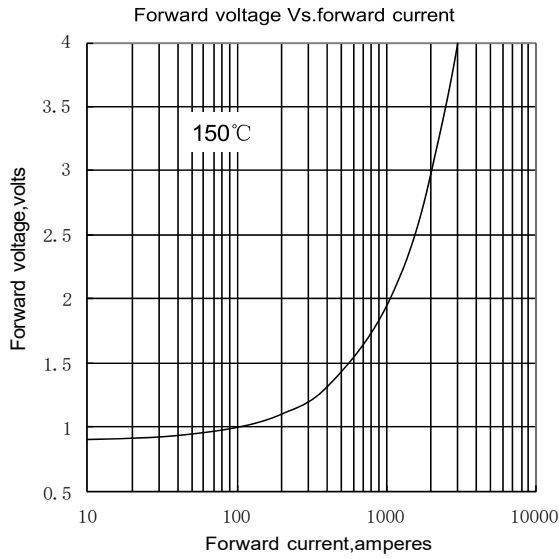


Fig.1

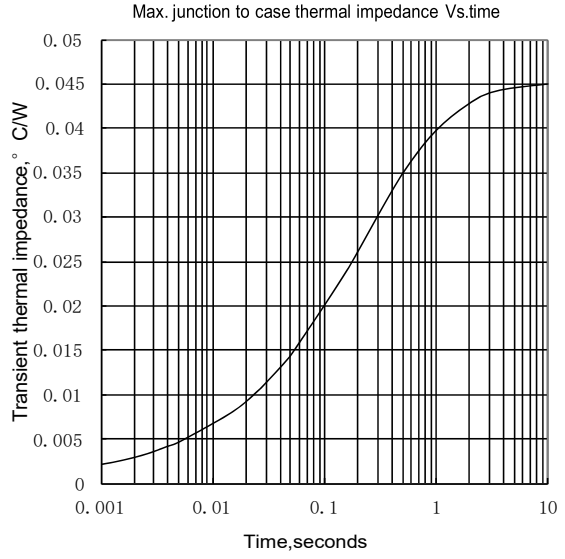


Fig.2

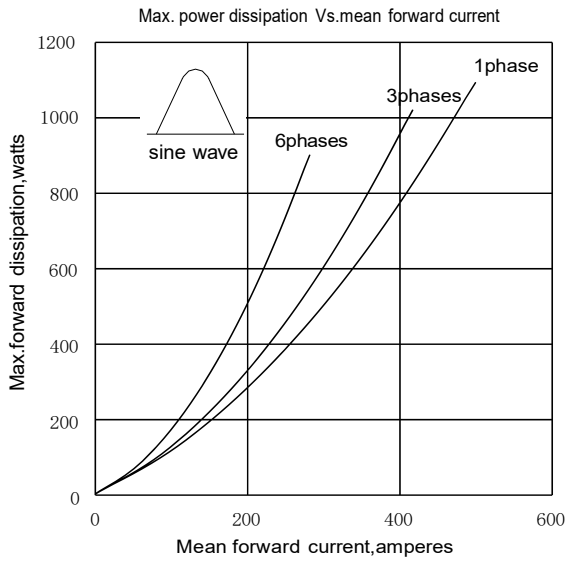


Fig.3

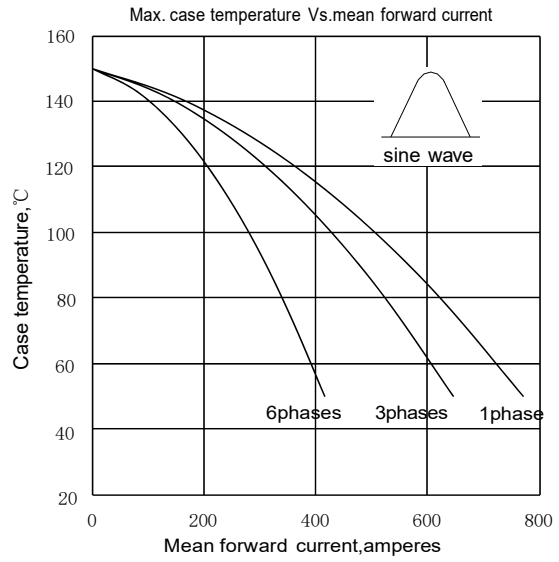


Fig.4

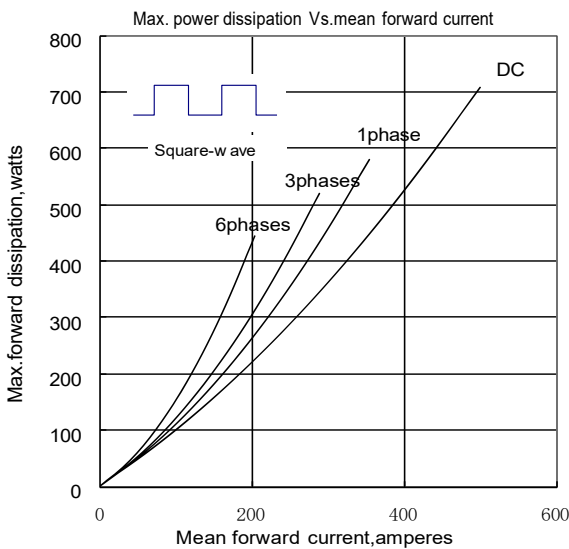


Fig.5

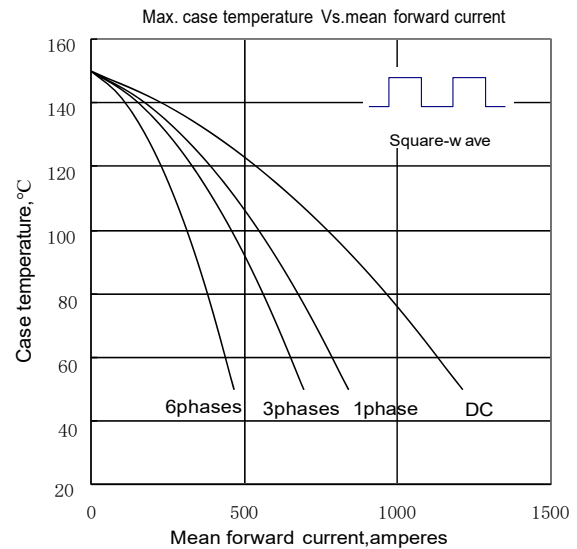


Fig.6

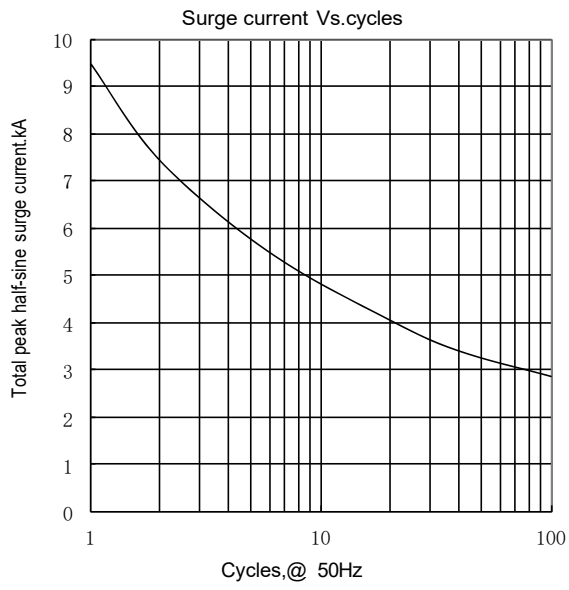


Fig.7

Outline:

