

Features :

- Isolated mounting base 3000V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

Typical Applications

- Various rectifiers
- DC supply for PWM inverter

V_{RSM}	V_{RRM}	品名
900V	800V	Mx500D80
1100V	1000V	Mx500D100
1300V	1200V	Mx500D120
1500V	1400V	Mx500D140
1700V	1600V	Mx500D160
1900V	1800V	Mx500D180

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 Single side cooled, $T_c=100^{\circ}\text{C}$	150			500	A
$I_F(\text{RMS})$	RMS forward current		150			785	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			30	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$	150			16.0	kA
I^{2t}	I^{2t} for fusing coordination					1280	$\text{A}^2\text{s} \times 10^3$
V_{FO}	Threshold voltage		150			0.75	V
r_F	Forward slope resistance					0.30	$\text{m}\Omega$
V_{FM}	Peak forward voltage	$I_{FM}=1500\text{A}$	25			1.32	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled per chip				0.090	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180° sine Single side cooled per chip				0.024	$^{\circ}\text{C}/\text{W}$
V_{iso}	Isolation voltage	50Hz,R.M.S., $t=1\text{min}$, $I_{iso}:1\text{mA(max)}$		3000			V
F_m	Terminal connection torque(M10)				12.0		N·m
	Mounting torque(M6)				6.0		N·m
T_{vj}	Junction temperature			-40		150	$^{\circ}\text{C}$
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				1500		g
Outline	M06						

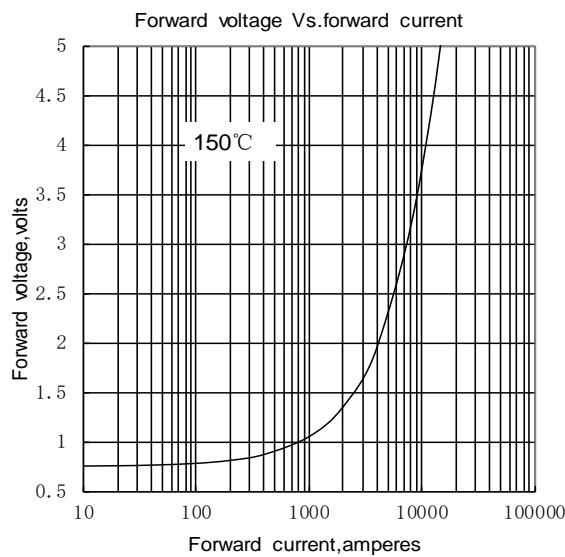


Fig.1

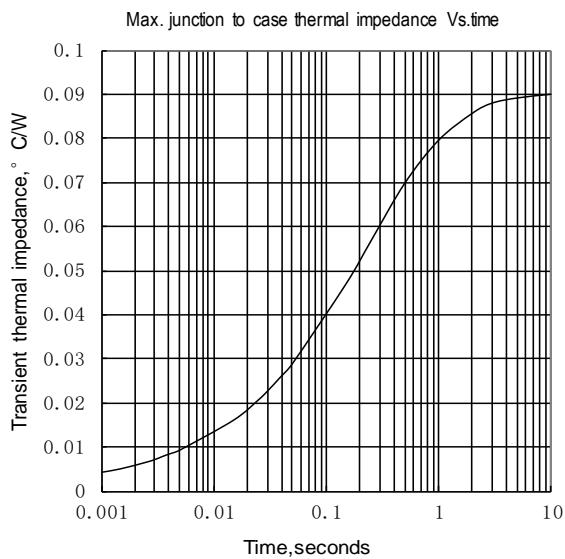


Fig.2

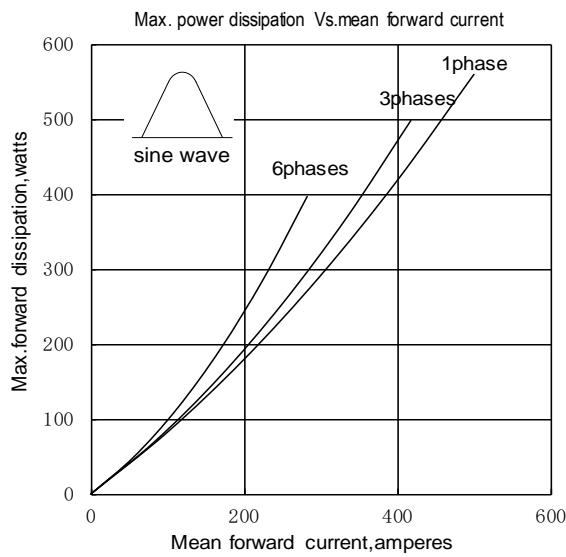


Fig.3

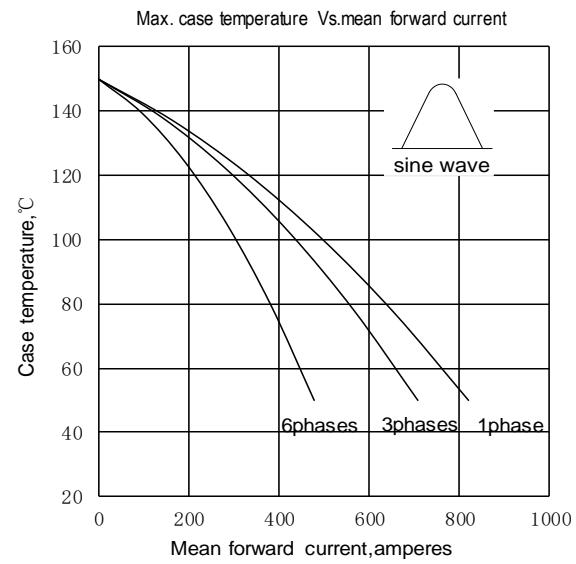


Fig.4

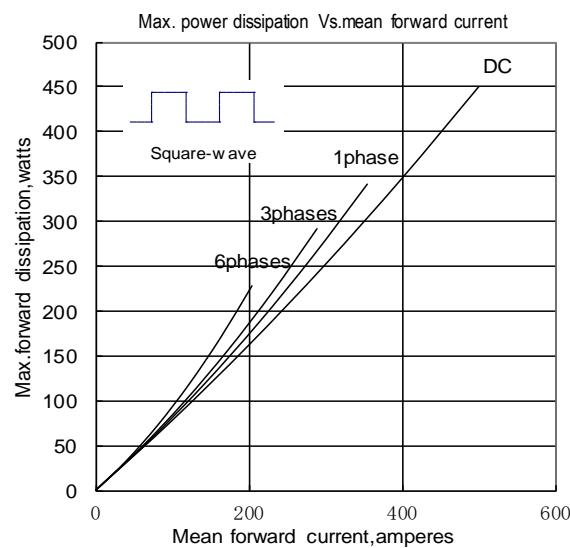


Fig.5

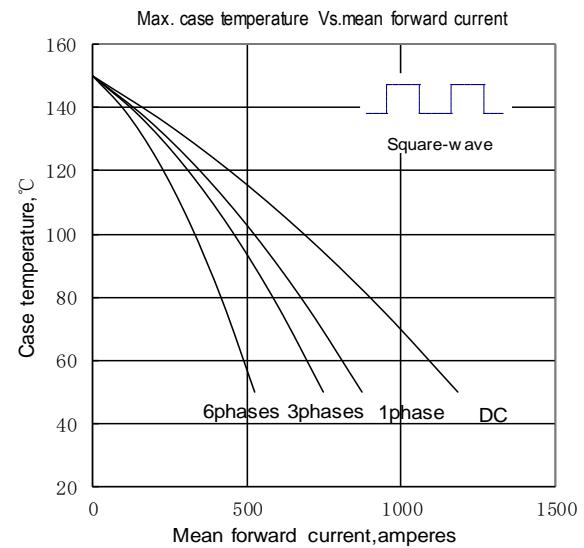


Fig.6

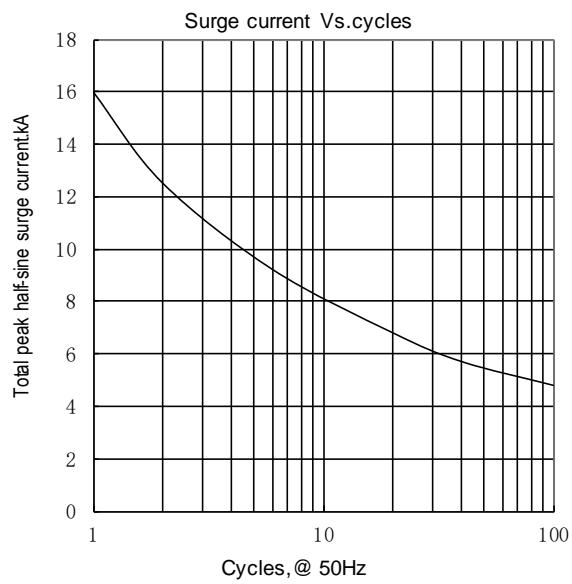


Fig.7

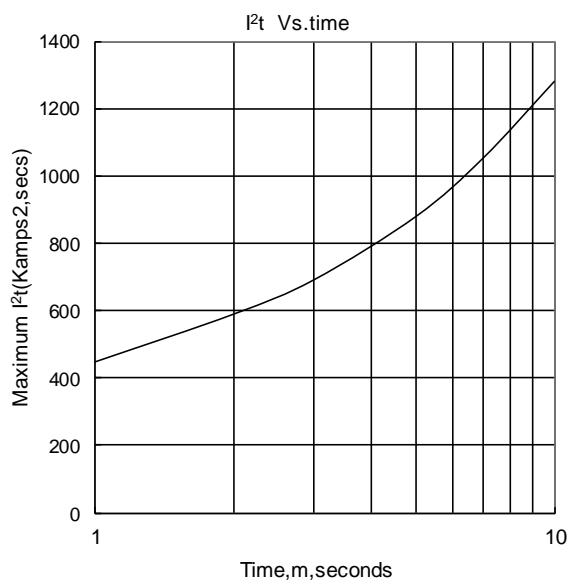
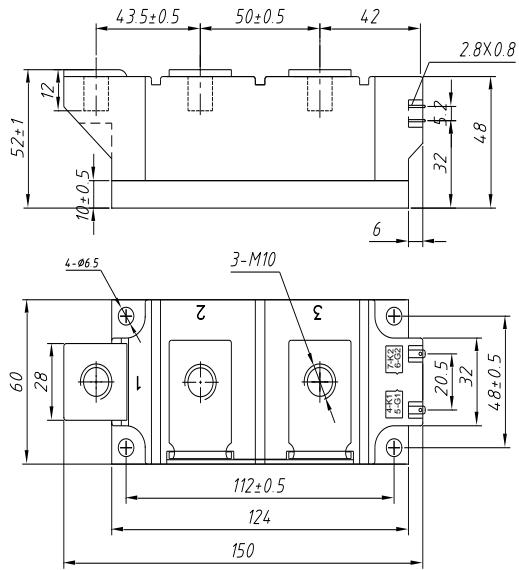


Fig.8



MD500D**

MR500D**

MC500D**

