

**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
2100V	2000V	Mx500D200
2300V	2200V	Mx500D220
2600V	2500V	Mx500D250

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j$ (°C)	VALUE			UNIT
				Min.	Typ.	Max.	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=100^\circ\text{C}$	150			500	A
$I_{F(RMS)}$	RMS forward current		150			785	A
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	150			40	mA
$I_{FSM}$	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$	150			16	kA
$I^{2t}$	$I^{2t}$ for fusing coordination					1280	$\text{A}^2\text{s} \times 10^3$
$V_{FO}$	Threshold voltage		150			0.85	V
$r_F$	Forward slope resistance					0.38	$\text{m}\Omega$
$V_{FM}$	Peak forward voltage	$I_{FM}=1500\text{A}$	25			1.60	V
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Single side cooled per chip				0.075	$^\circ\text{C }/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	D.C. Single side cooled per chip				0.040	$^\circ\text{C }/\text{W}$
$V_{iso}$	Isolation voltage	50Hz,R.M.S., $t=1\text{min}$ , $I_{iso}=1\text{mA(max)}$		3000			V
$F_m$	Terminal connection torque(M10)			10.0		12.0	N·m
	Mounting torque(M6)			4.5		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				1540		g
Outline	M06						

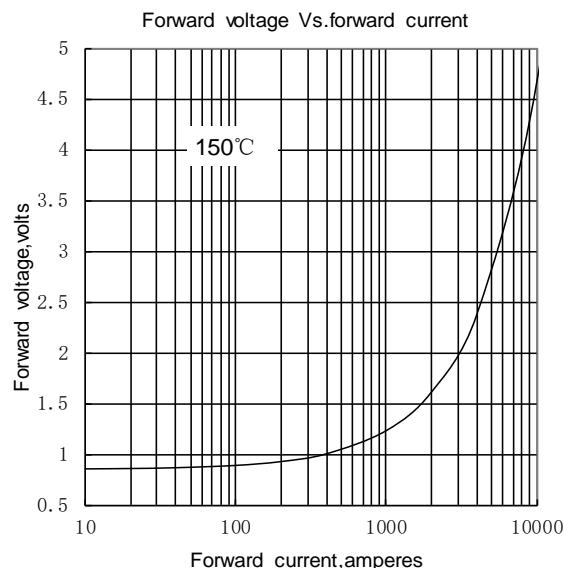


Fig.1

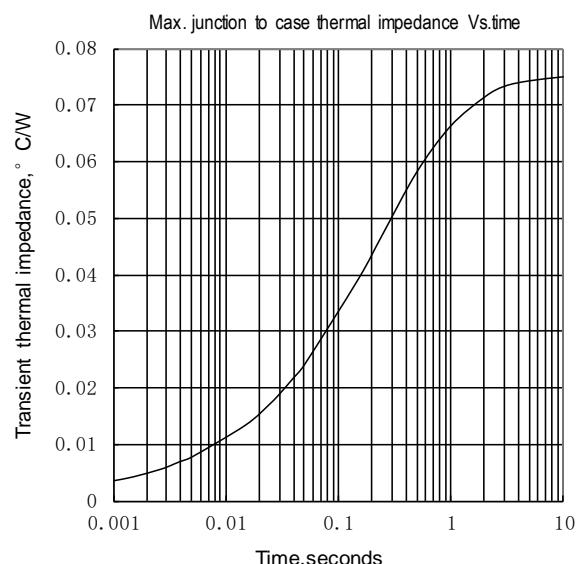


Fig.2

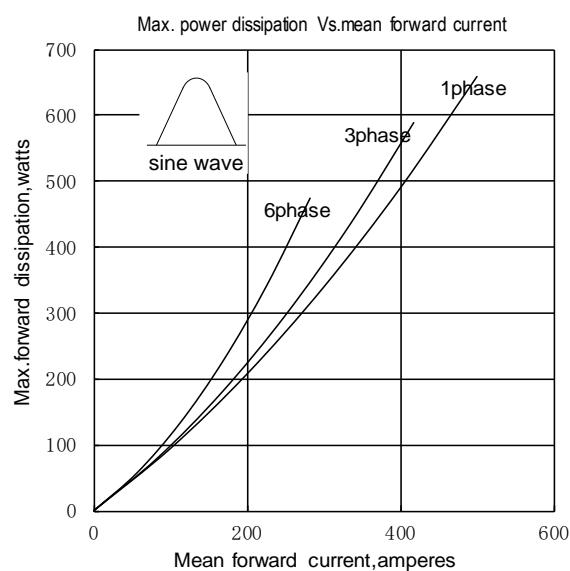


Fig.3

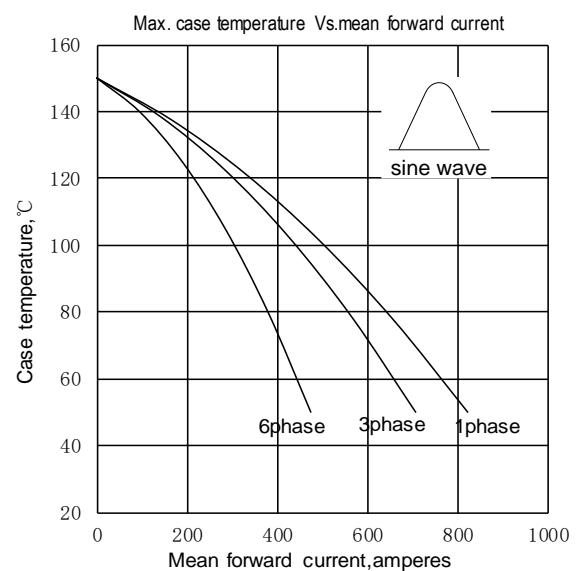


Fig.4

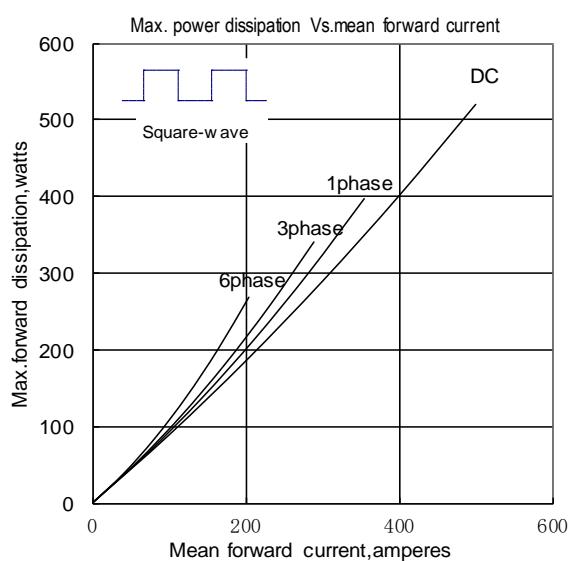


Fig.5

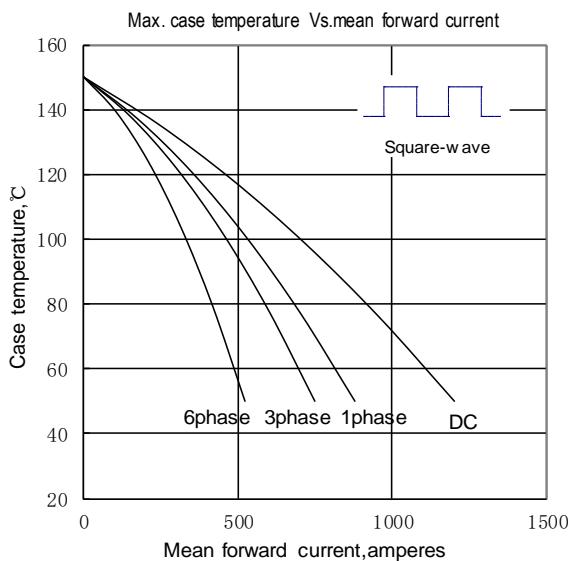


Fig.6

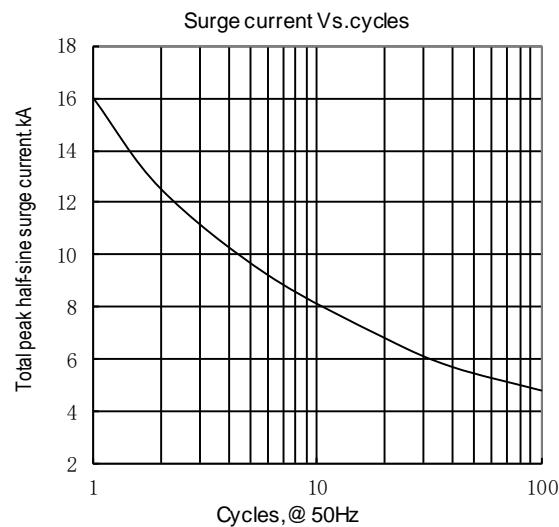
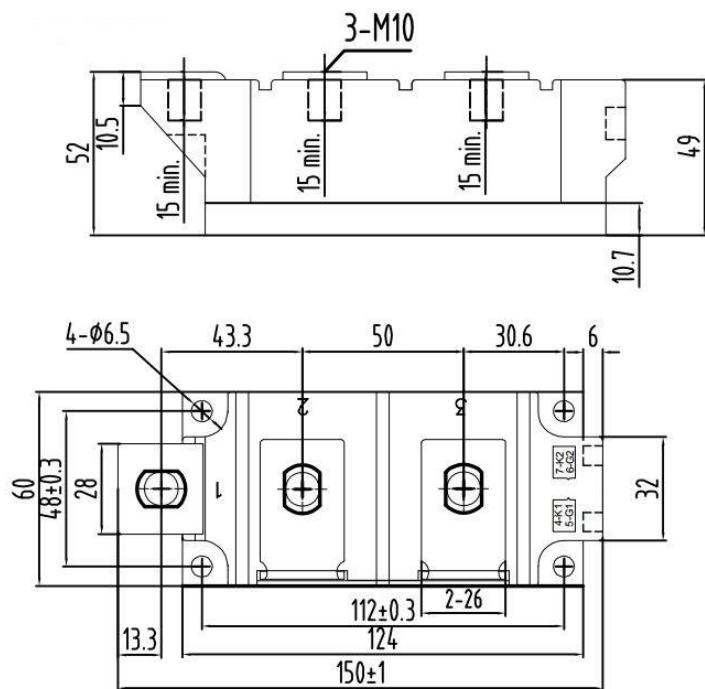
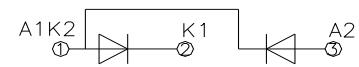


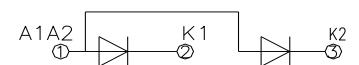
Fig.7



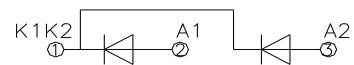
MD500D\*\*



MR500D\*\*



MC500D\*\*

Unmarked dimensional tolerance :  $\pm 0.5\text{mm}$