



# Diode Modules MDx500



**$I_{F(AV)}$**       **500A**  
 **$V_{RRM}$**         **600~1800V**  
 **$I_{FSM}$**           **$19A \times 10^3$**   
 **$I^2t$**               **$1805A^2 \cdot S \cdot 10^3$**

### Features:

- Isolated mounting base 2500V~
- Pressure contact technology with Increased power cycling capability
- Space and weight savings

### Typical Applications

- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(°C)$	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_C=100°C$	150			500	A
$I_{F(RMS)}$	RMS forward current		150			785	A
$V_{RRM}$	Repetitive peak reverse voltage	$V_{RRM} \text{ tp}=10\text{ms}$ $V_{RSM}=V_{RRM}+100V$	150	600		1800	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	150			45	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	150			19.0	KA
$I^2t$	$I^2T$ for fusing coordination	$V_R=0.6V_{RRM}$					1805
$V_{FO}$	Threshold voltage		150			0.75	V
$r_F$	Forward slop resistance						0.28
$V_{FM}$	Peak forward voltage	$I_{FM}=1800A$	25			1.50	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180°sine' Single side cooled				0.065	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180° sine' Single side cooled				0.024	°C /W
$V_{iso}$	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}:1mA(\text{max})$		2500			V
$F_m$	Terminal connection torque(M10)				12		N·m
	Mounting torque(M6)				6		N·m
$T_{stg}$	Stored temperature			-40		125	°C
$W_t$	Weight				2300		g
Outline							

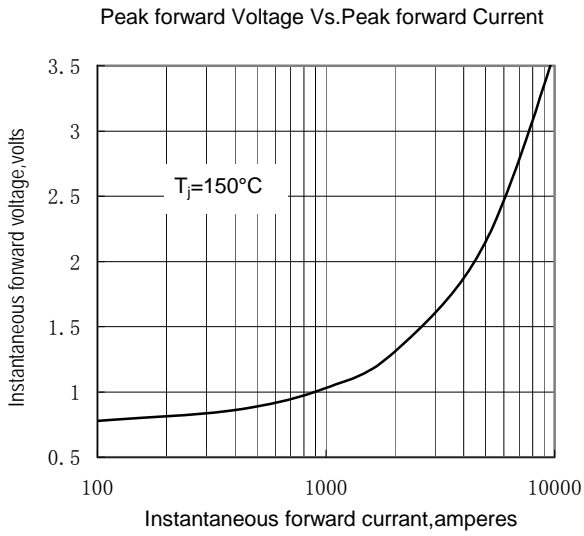


Fig.1

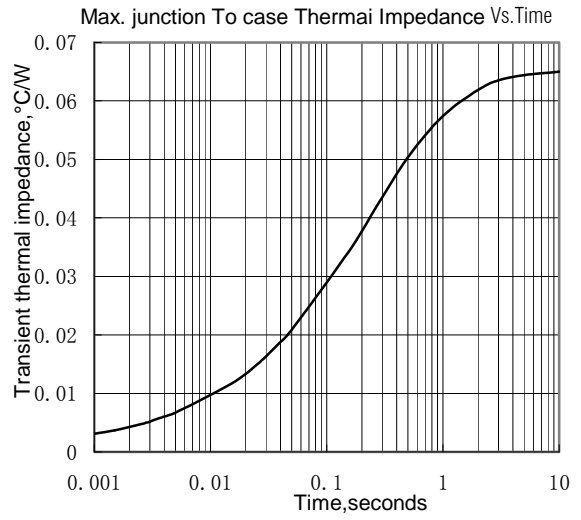


Fig.2

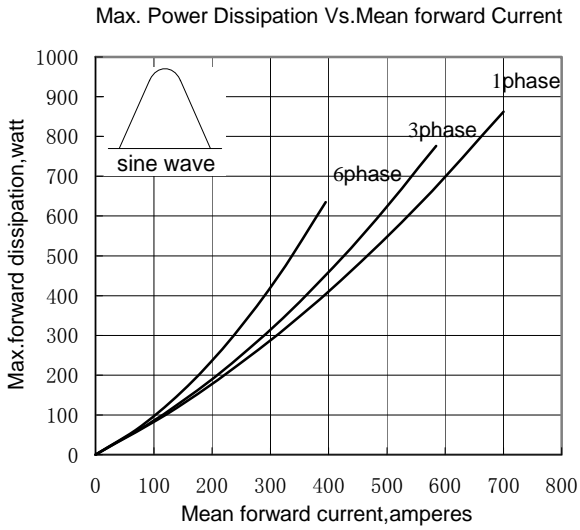


Fig.3

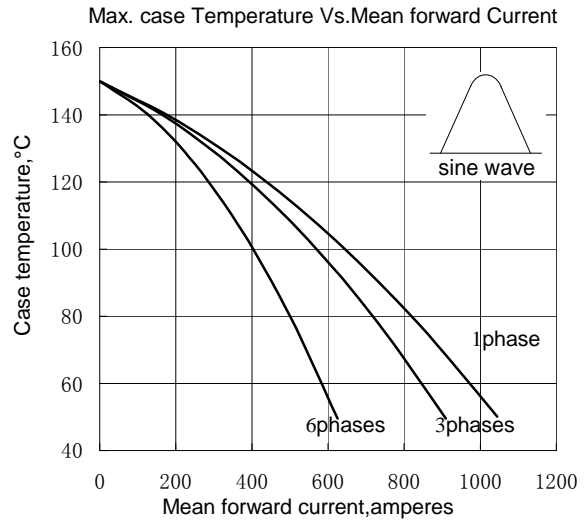


Fig.4

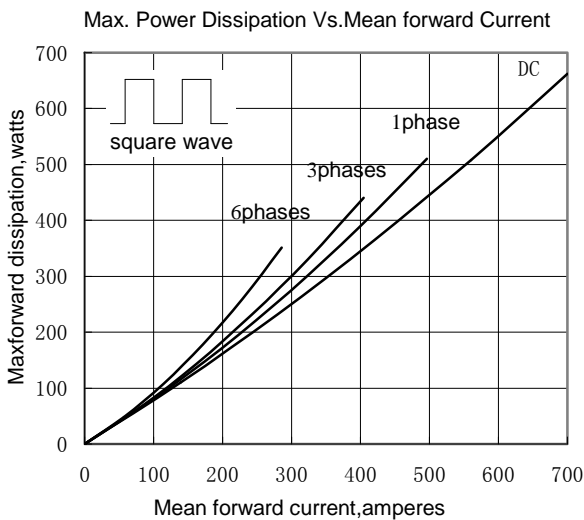


Fig.5

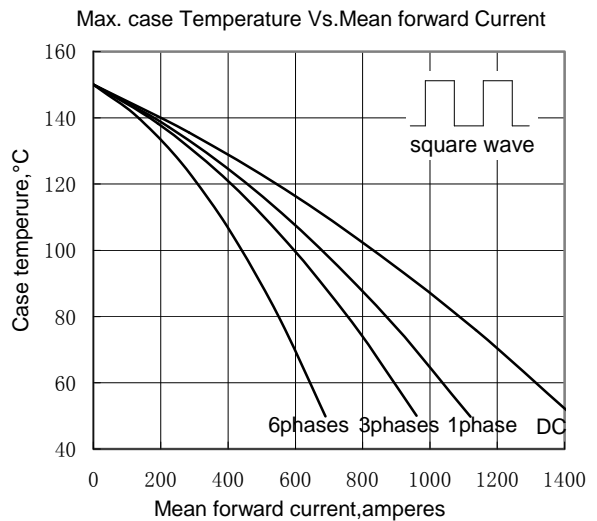


Fig.6

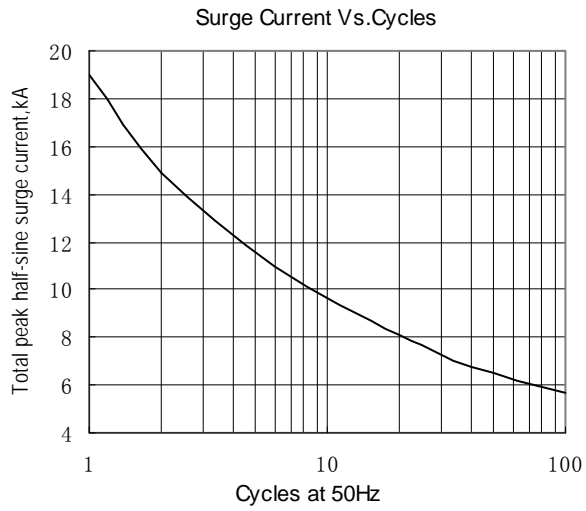


Fig.7

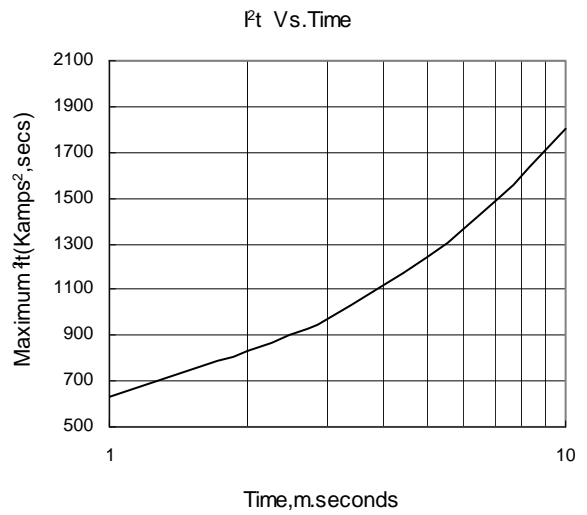


Fig.8

**Outline:**

