



AS ENERGI

# Diode Modules MDx400



**$I_{F(AV)}$**       **400A**  
 **$V_{RRM}$**       **1900~2500V**  
 **$I_{FSM}$**        **$13 \text{ A} \times 10^3$**   
 **$I^2t$**        **$845 \text{ A}^2 \text{ S} \times 10^3$**

## Features:

- Isolated mounting base 3000V~
- 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	$T_j(\text{°C})$	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side water cooled, $T_c=60\text{°C}$	150			400	A
$I_F(\text{RMS})$	RMS forward current		150			628	A
$V_{RRM}$	Repetitive peak reverse voltage	$V_{RRM} \text{ tp}=10\text{ms}$ $V_{RsM}=V_{RRM}+100\text{V}$	150	1900		2500	V
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	150			30	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	150			13.0	KA
$I^2t$	$I^2T$ for fusing coordination	$V_R=0.6V_{RRM}$				845	$\text{A}^2\text{s} \times 10^3$
$V_{FO}$	Threshold voltage		150			0.85	V
$r_F$	Forward slop resistance					0.69	$\text{m}\Omega$
$V_{FM}$	Peak forward voltage	$I_{FM}=1200\text{A}$	25			1.88	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled				0.140	$\text{°C /W}$
$R_{th(c-h)}$	Thermal resistance case to heat sink	Single side cooled				0.04	$\text{°C /W}$
$V_{iso}$	Isolation voltage	50Hz,R.M.S,t=1min, $I_{iso}:1\text{mA(max)}$		3000			V
$F_m$	Terminal connection torque(M8)				12		N·m
	Mounting torque(M6)				6		N·m
$T_{stg}$	Stored temperature			-40		125	$\text{°C}$
$W_t$	Weight				1300		g
Outline							

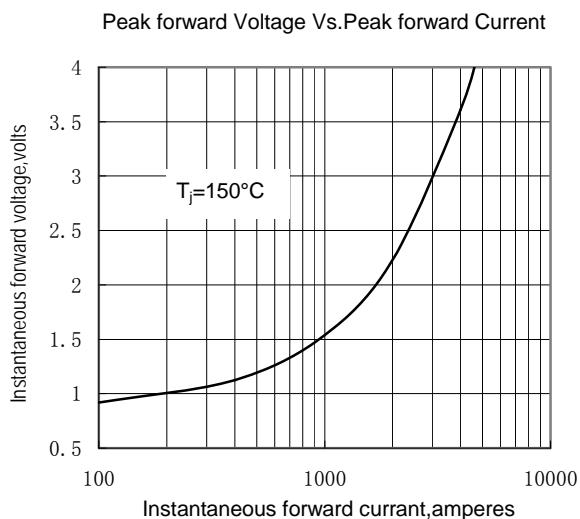


Fig.1

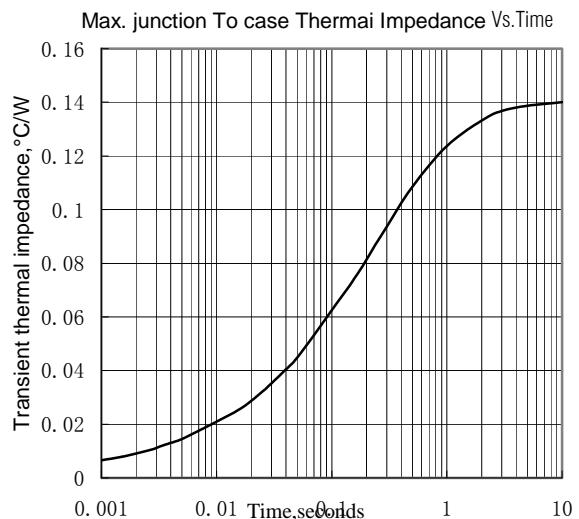


Fig.2

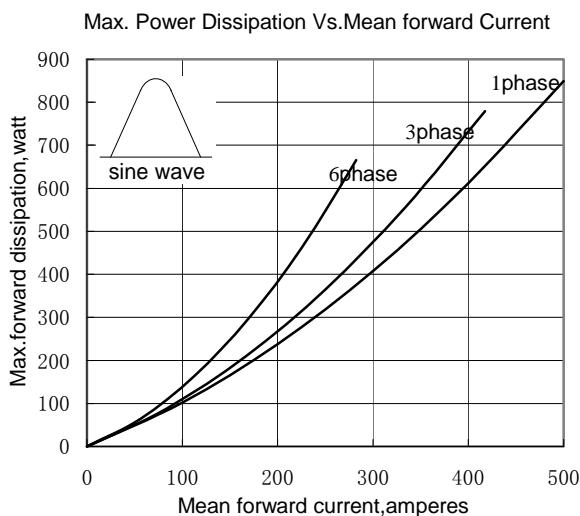


Fig.3

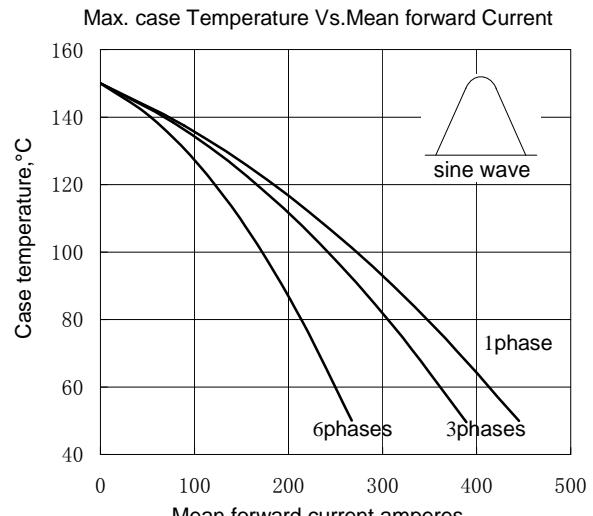


Fig.4

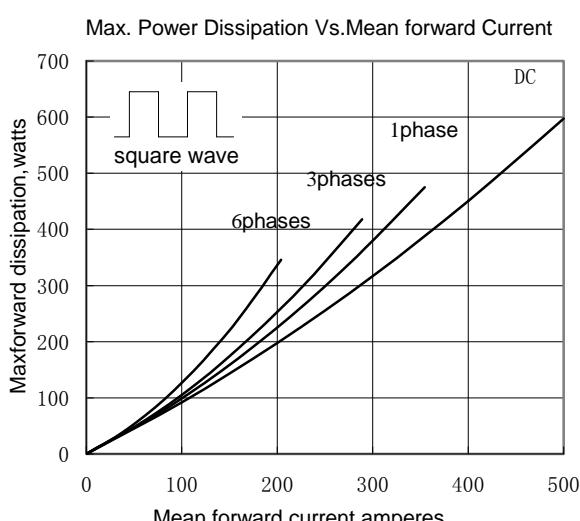


Fig.5

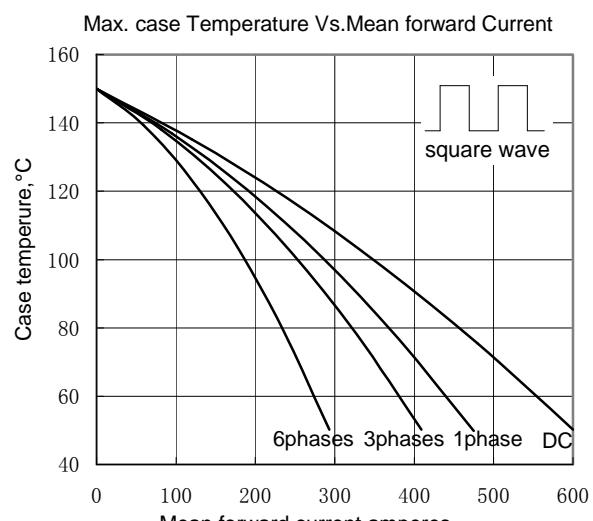


Fig.6

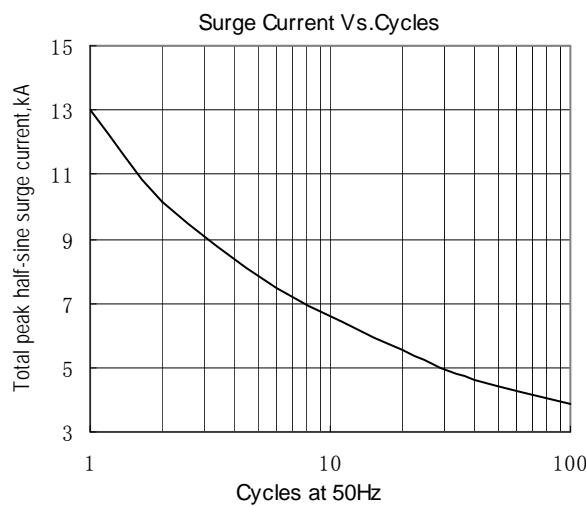


Fig.7

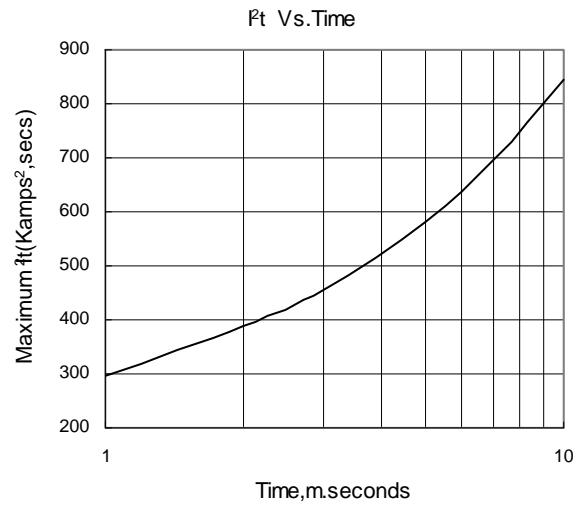


Fig.8

### Outline:

