



AS ENERGI

# Diode Modules MDx400



$I_{F(AV)}$	400A
$V_{RRM}$	1900~2500V
$I_{FSM}$	13 A $\times 10^3$
$I^2t$	845A $^2$ 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	$T_j$ (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=100^\circ C$	150			400	A
$I_{F(RMS)}$	RMS forward current		150			628	A
$V_{RRM}$	Repetitive peak reverse voltage	$V_{RRM}$ tp=10ms $V_{RsM}=V_{RRM}+100V$	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	A $^2s \times 10^3$
$V_{FO}$	Threshold voltage		150			0.85	V
$r_F$	Forward slop resistance					0.49	mΩ
$V_{FM}$	Peak forward voltage	$I_{FM}=1200A$	25			1.55	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled				0.090	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180° sine Single side cooled				0.04	°C /W
$V_{iso}$	Isolation voltage	50Hz,R.M.S,t=1min, $I_{iso}:1mA(max)$		3000			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				1350		g
Outline							

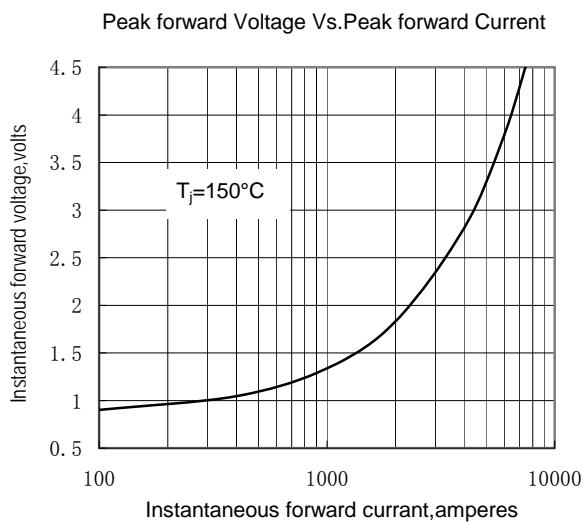


Fig.1

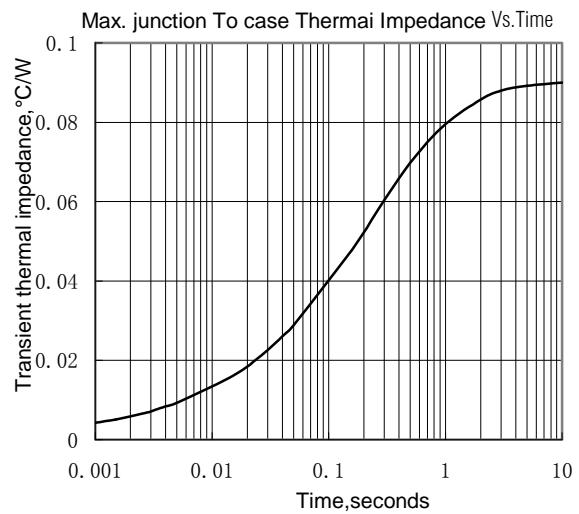


Fig.2

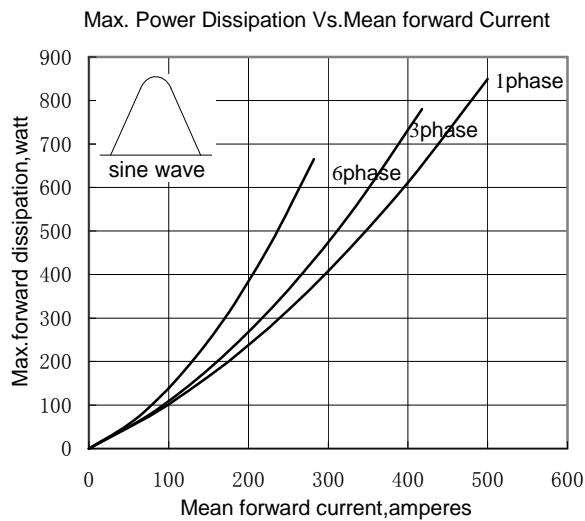


Fig.3

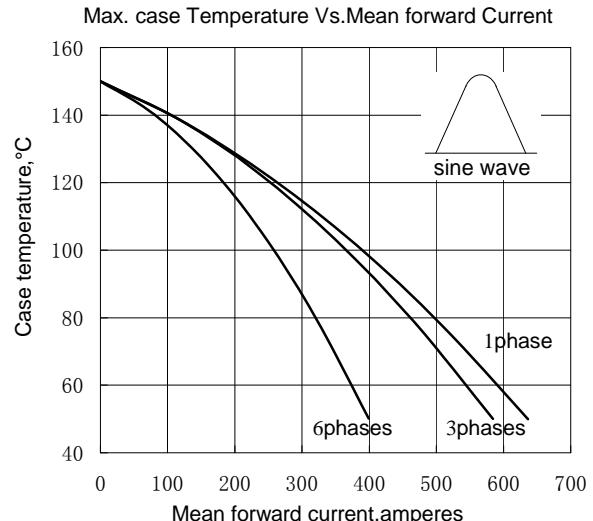


Fig.4

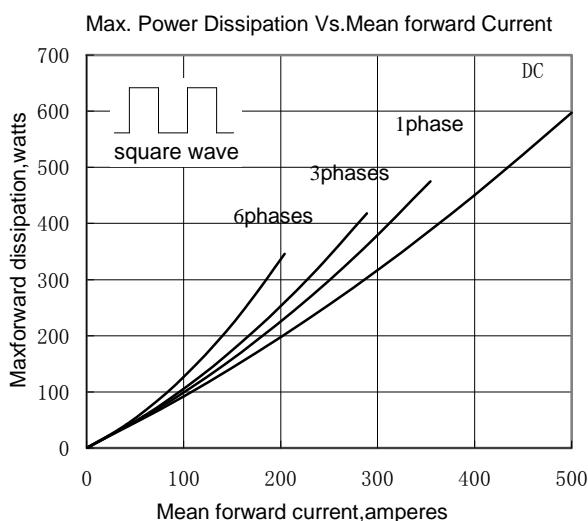


Fig.5

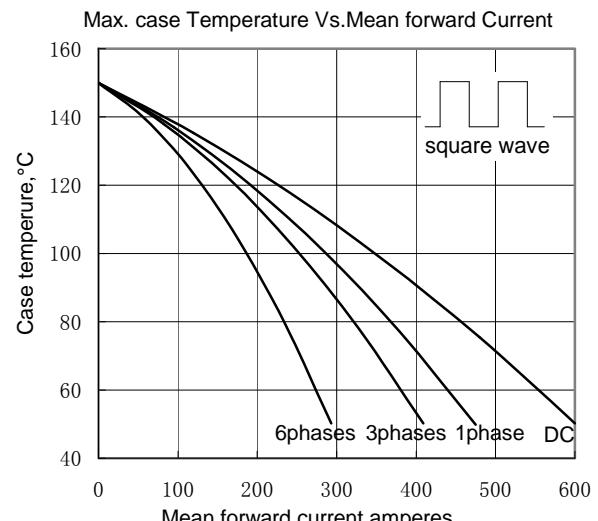


Fig.6

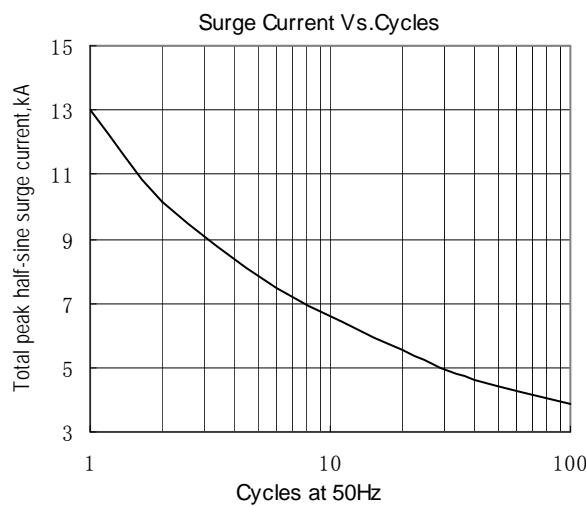


Fig.7

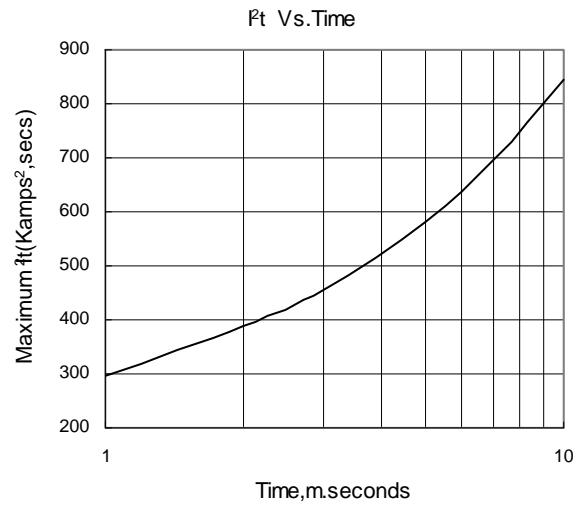


Fig.8

### Outline:

