



Diode Modules MDx40



$I_{F(AV)}$	40A
V_{RRM}	1900~2500V
I_{FSM}	$1.0 \text{ A} \times 10^3$
I^2t	$5.0 \text{ A}^2 \text{ S} \cdot 10^3$

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 cooled, $T_C=100\text{°C}$	150			40	A
$I_{F(RMS)}$	RMS forward current		150			63	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			8	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			1.0	KA
I^2t	I^2T for fusing coordination	$V_R=0.6V_{RRM}$				5.0	$\text{A}^2\text{s} \cdot 10^3$
V_{FO}	Threshold voltage		150			0.85	V
r_F	Forward slop resistance					4.50	$\text{m}\Omega$
V_{FM}	Peak forward voltage	$I_{FM}=120\text{A}$	25			1.59	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled				0.90	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180° sine Single side cooled				0.2	°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(M5)				4		$\text{N}\cdot\text{m}$
	Mounting torque(M6)				6		$\text{N}\cdot\text{m}$
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				115		g
Outline							

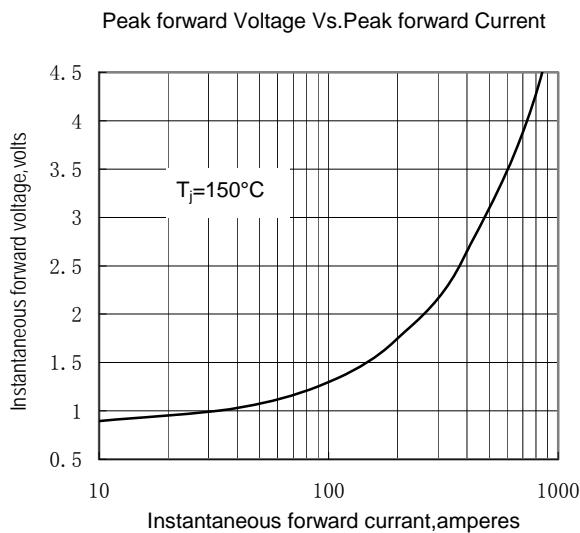


Fig.1

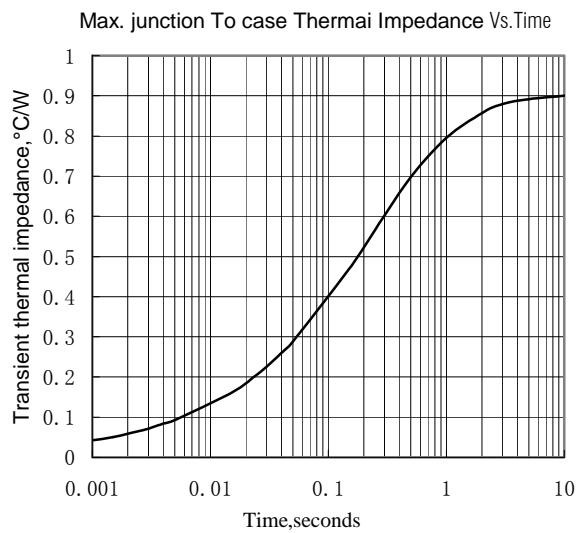


Fig.2

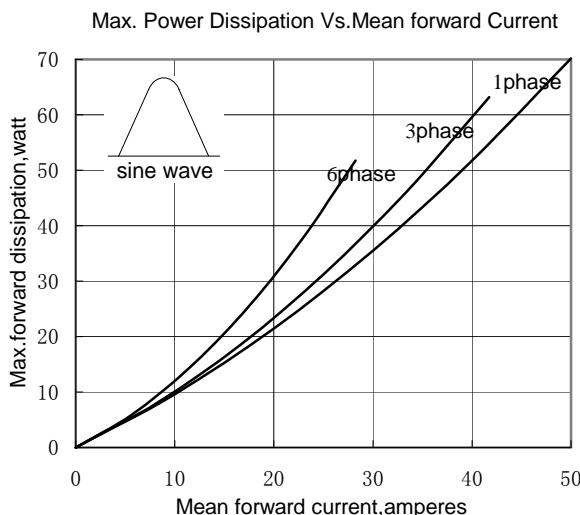


Fig.3

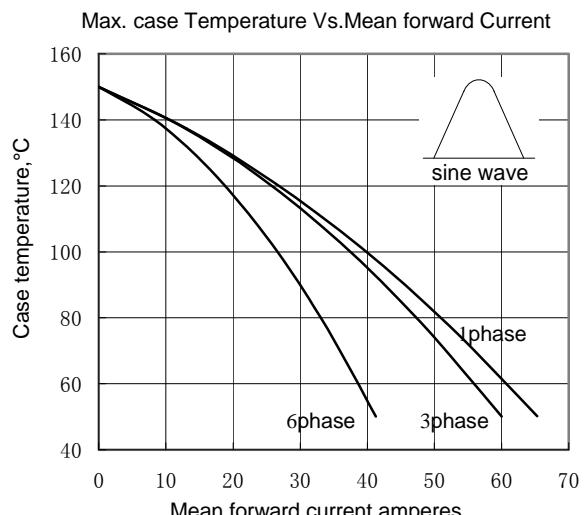


Fig.4

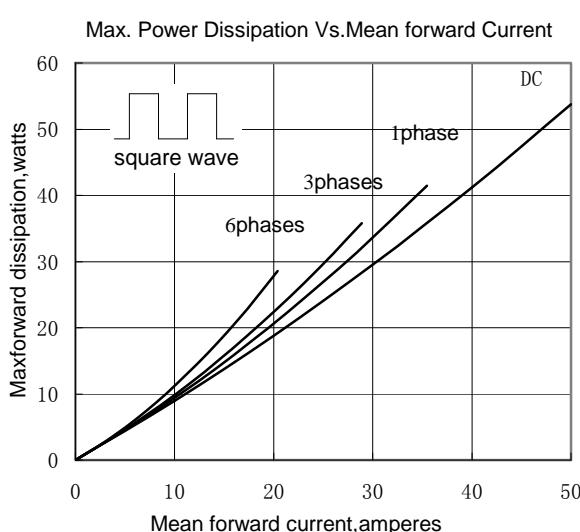


Fig.5

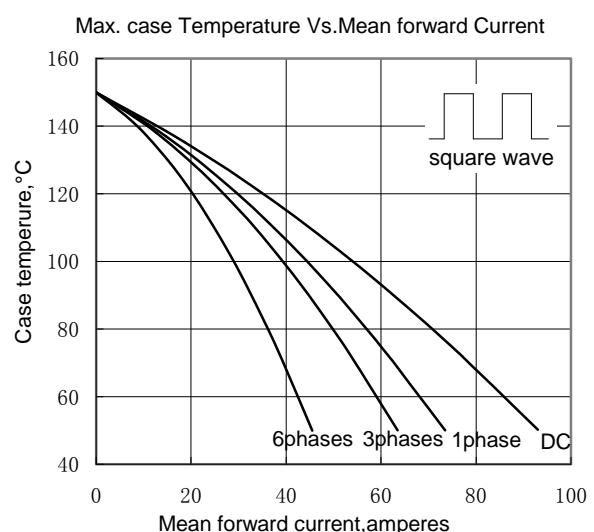


Fig.6

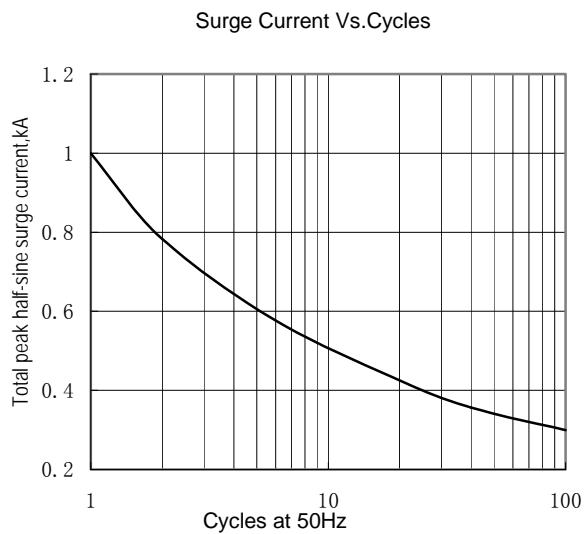


Fig.7

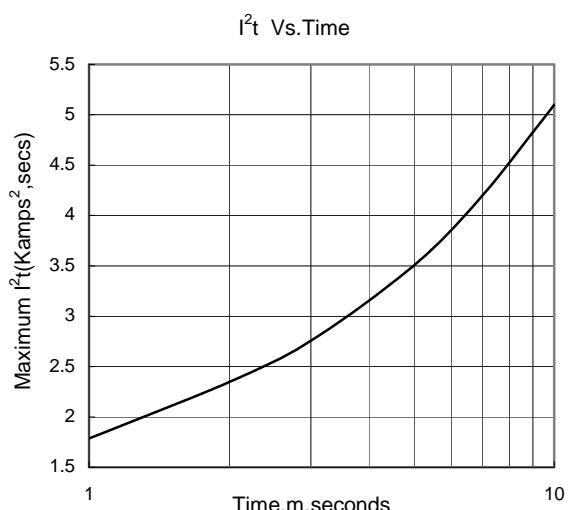


Fig.8

Outline:

