



# Diode Modules MDx160



AS ENERGI

**I<sub>F(AV)</sub>** 160A  
**V<sub>RRM</sub>** 600~1800V  
**I<sub>FSM</sub>** 4.6 A×10<sup>3</sup>  
**I<sup>2</sup>t** 106A<sup>2</sup> S×10<sup>3</sup>

## 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 <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Single side cooled, T <sub>C</sub> =100°C	150			160	A
I <sub>F(RMS)</sub>	RMS forward current		150			251	A
V <sub>RRM</sub>	Repetitive peak reverse voltage	V <sub>RRM</sub> tp=10ms V <sub>RsM</sub> = V <sub>RRM</sub> +100V	150	600		1800	V
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	150			12	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave V <sub>R</sub> =0.6V <sub>RRM</sub>	150			4.60	KA
I <sup>2</sup> t	I <sup>2</sup> T for fusing coordination					106	A <sup>2</sup> s×10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		150			0.80	V
r <sub>F</sub>	Forward slop resistance					1.35	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =480A	25			1.56	V
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	At 180° sine Single side cooled				0.230	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heatsink	At 180° sine Single side cooled				0.08	°C /W
V <sub>iso</sub>	Isolation voltage	50Hz,R.M.S,t=1min,I <sub>iso</sub> :1mA(max)		2500			V
F <sub>m</sub>	Terminal connection torque(M6)				6		N·m
	Mounting torque(M6)				6		N·m
T <sub>stg</sub>	Stored temperature			-40		125	°C
W <sub>t</sub>	Weight				320		g
Outline							

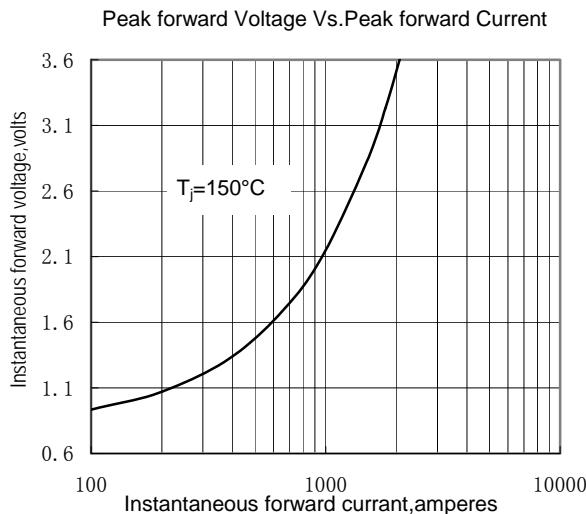


Fig.1

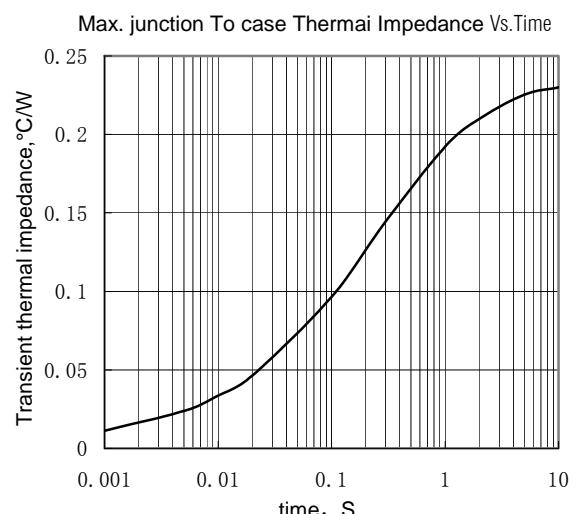


Fig.2

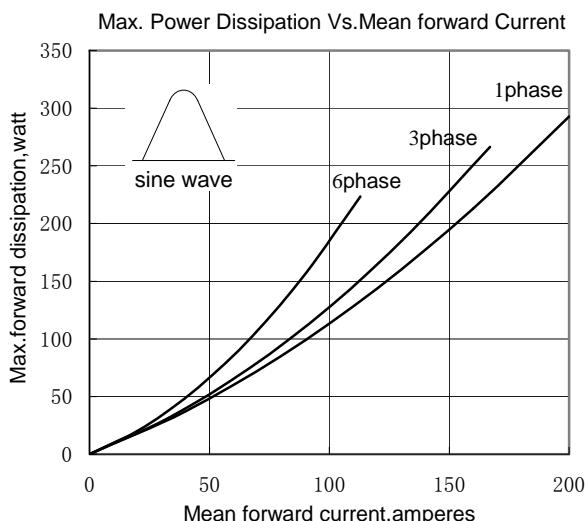


Fig.3

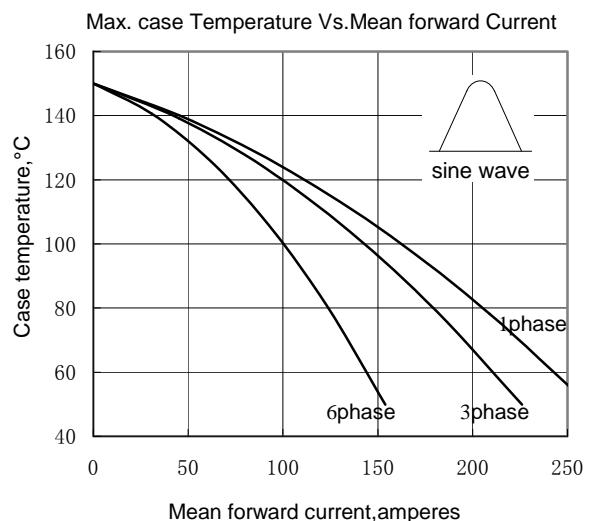


Fig.4

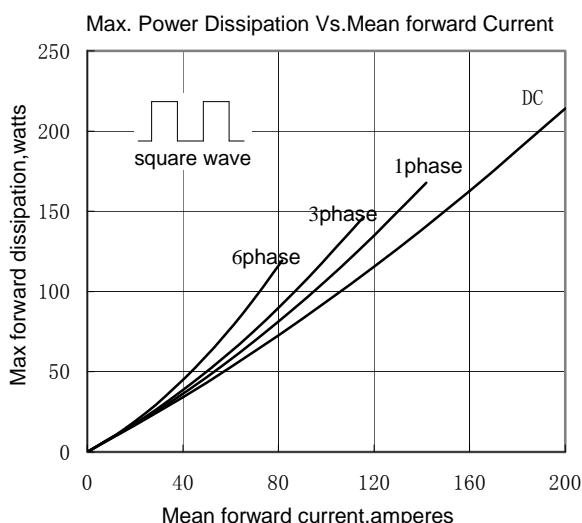


Fig.5

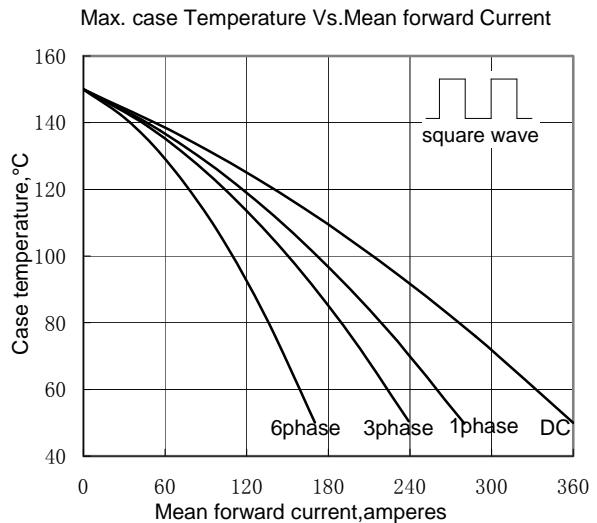


Fig.6

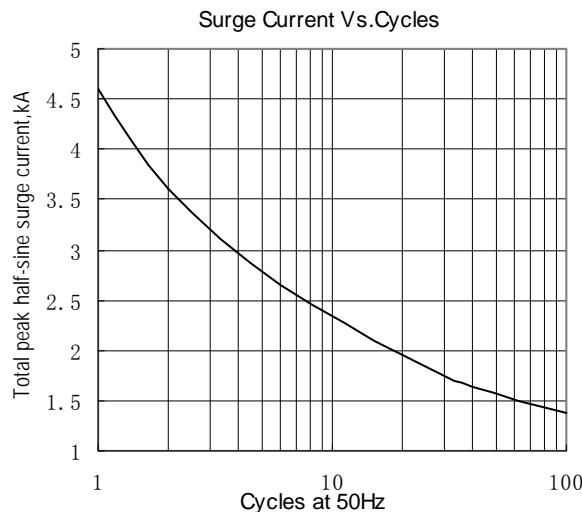


Fig.7

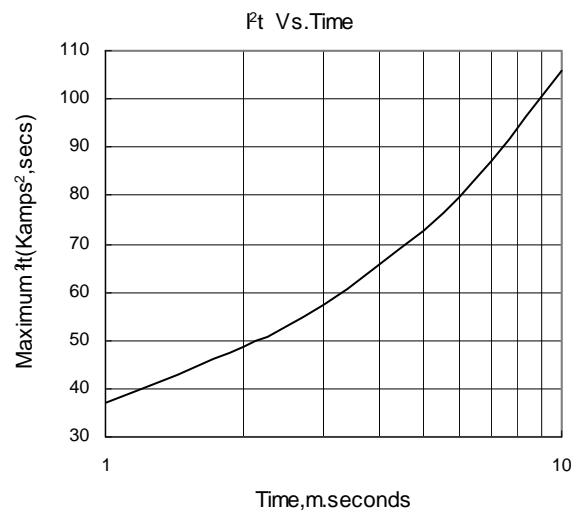


Fig.8

### Outline:

