



Diode Modules MDx500



$I_{F(AV)}$ **500A**
 V_{RRM} **1900~2500V**
 I_{FSM} **16 A·10³**
 I^2t **1280A² S·10³**

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 =60°C	150			500	A
$I_{F(RMS)}$	RMS forward current		150			785	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			40	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			16.0	KA
I^2t	I ² T for fusing coordination	V _R =0.6V _{RRM}					1280
V_{FO}	Threshold voltage		150			0.85	V
r_F	Forward slop resistance						0.53
V_{FM}	Peak forward voltage	I _{FM} =1500A	25			1.85	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine: Single side cooled				0.120	°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				1820		g
Outline							

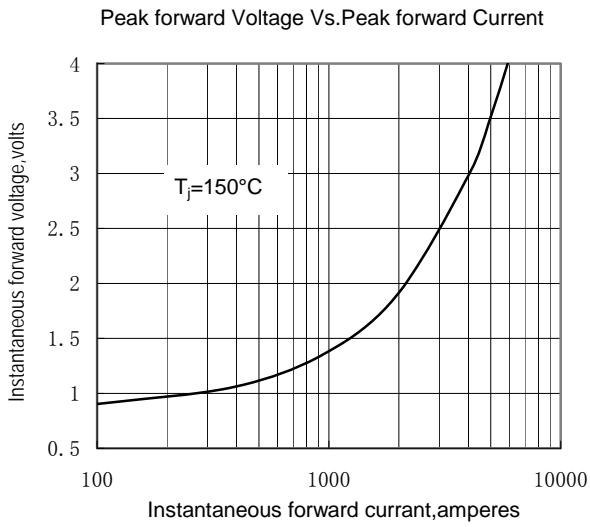


Fig.1

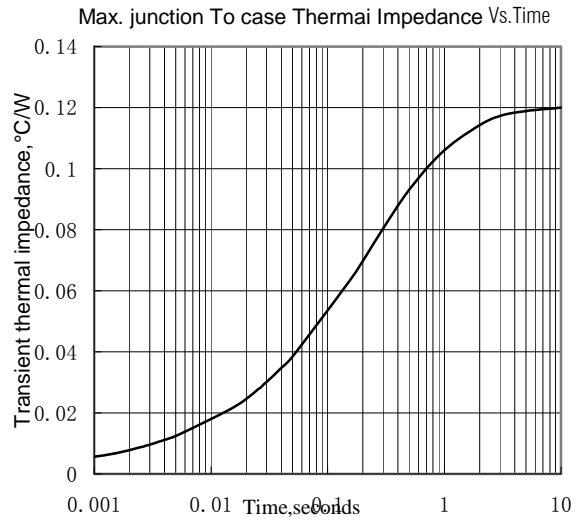


Fig.2

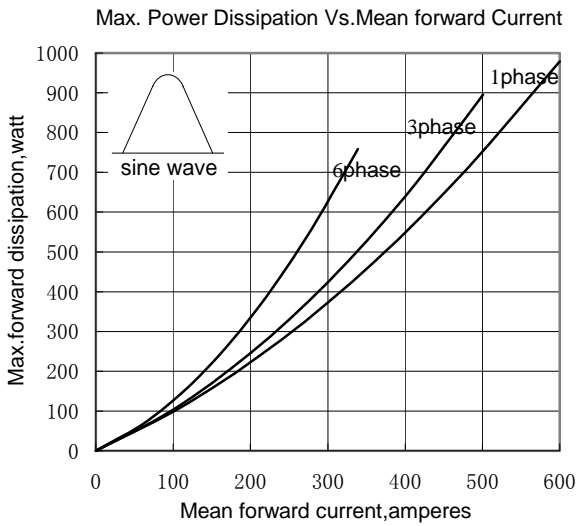


Fig.3

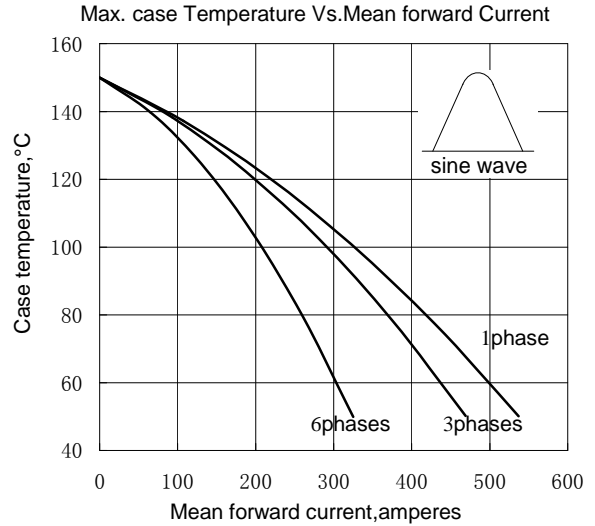


Fig.4

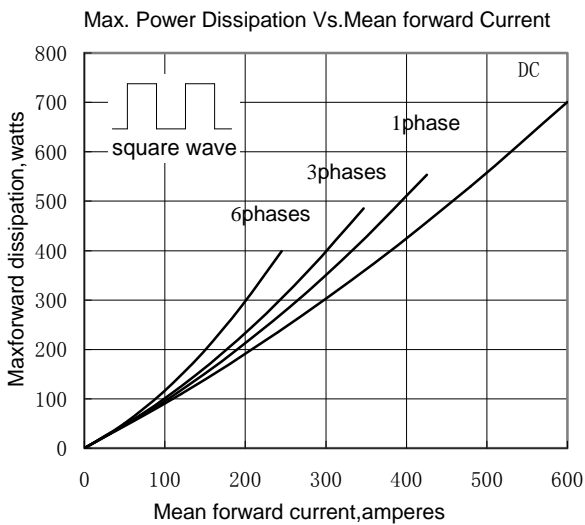


Fig.5

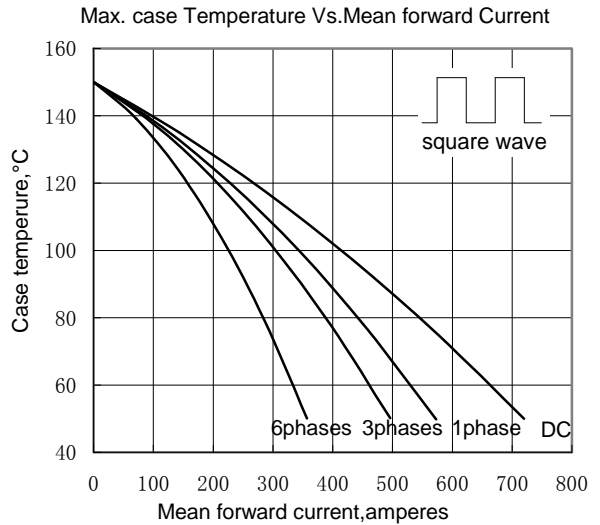


Fig.6

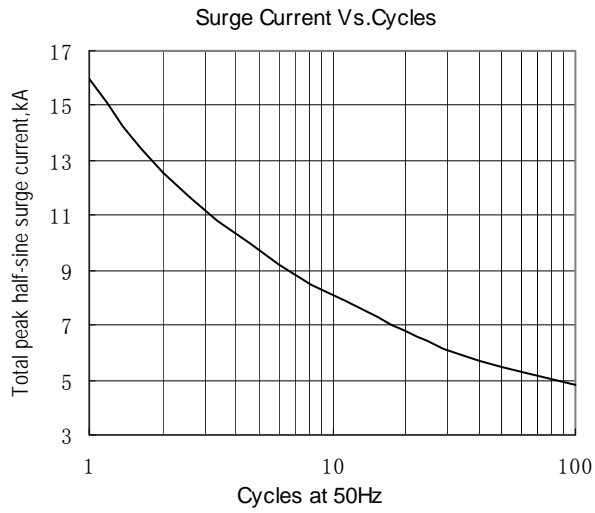


Fig.7

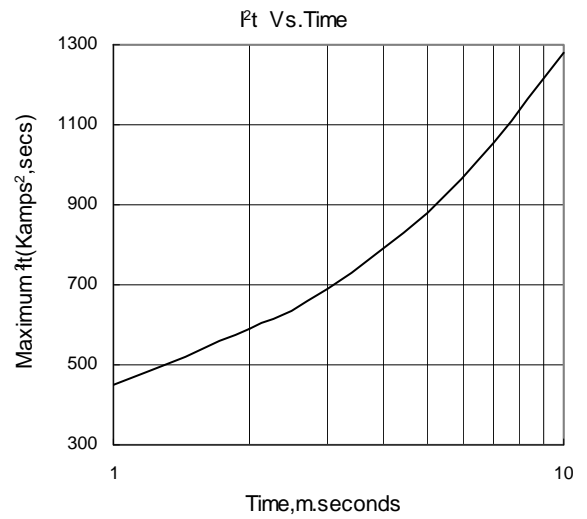


Fig.8

Outline:

