



Diode Modules MDx500



AS ENERGI

I_{F(AV)} 500A
V_{RRM} 600~1800V
I_{FSM} 16A×10³
I²t 1280A² S·10³

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 _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	600		1800	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 ² t	I ² T for fusing coordination	V _R =0.6V _{RRM}				1280	A ² s*10 ³
V _{FO}	Threshold voltage		150			0.75	V
r _F	Forward slop resistance					0.51	mΩ
V _{FM}	Peak forward voltage	I _{FM} =1500A	25			1.68	V
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine Single side cooled				0.130	°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)	2500				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							

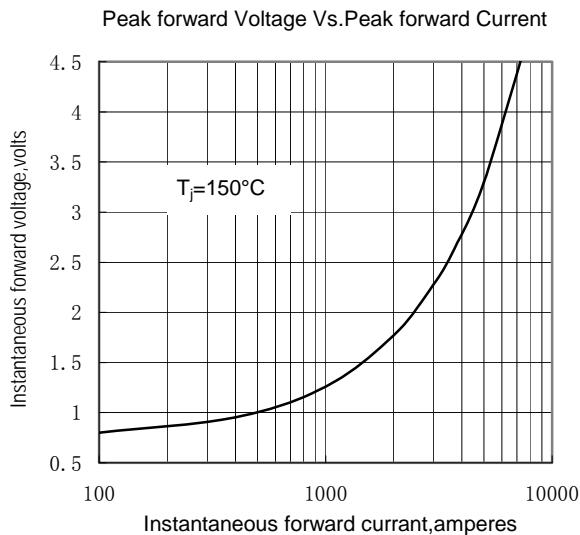


Fig.1

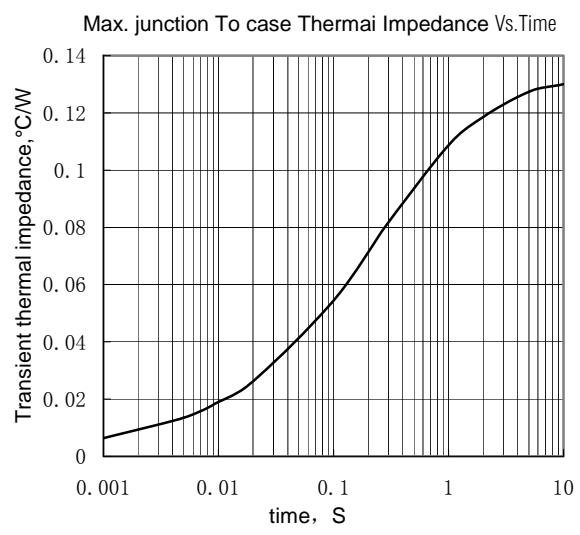


Fig.2

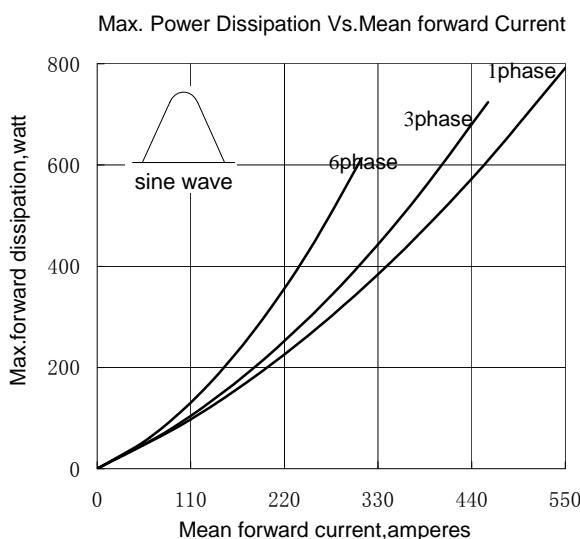


Fig.3

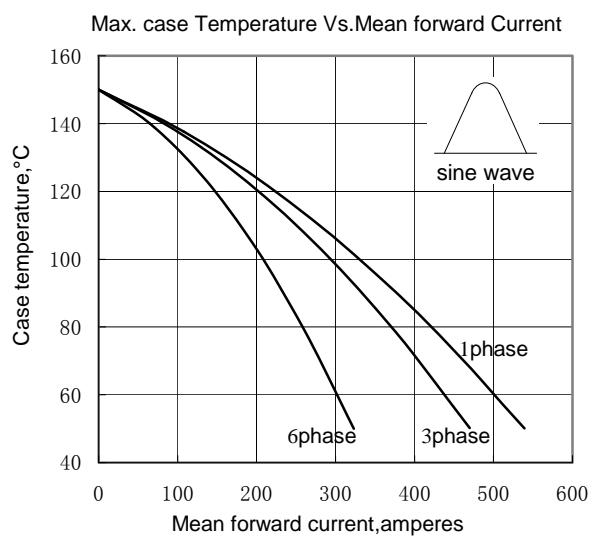


Fig.4

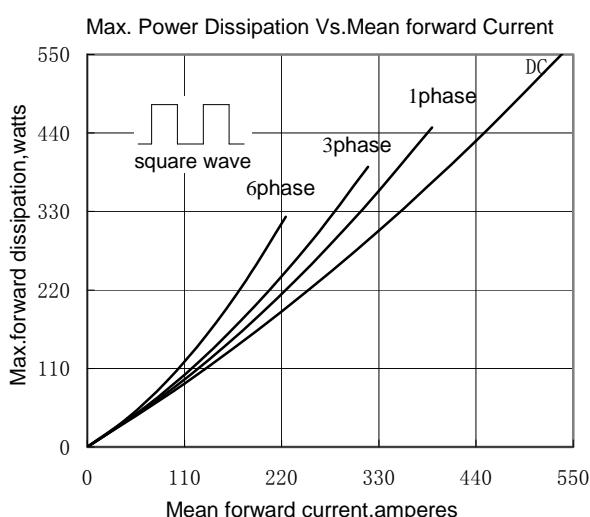


Fig.5

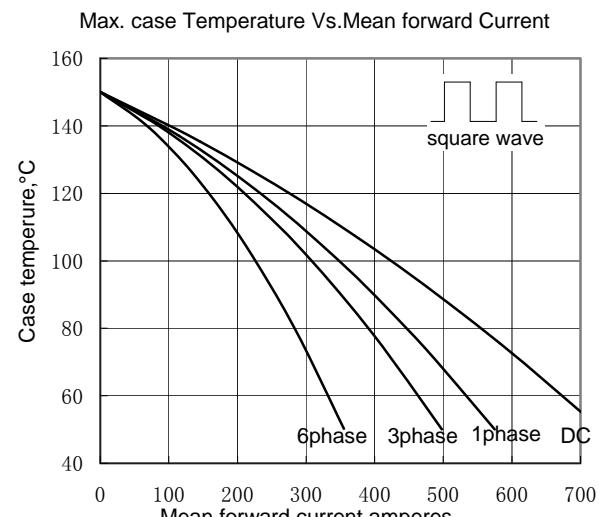


Fig.6

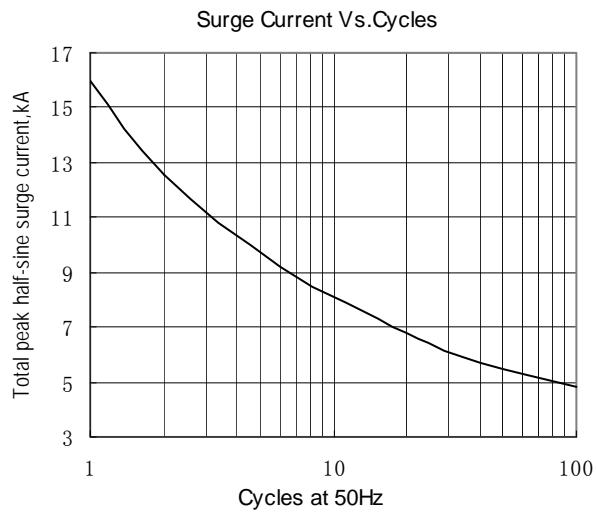


Fig.7

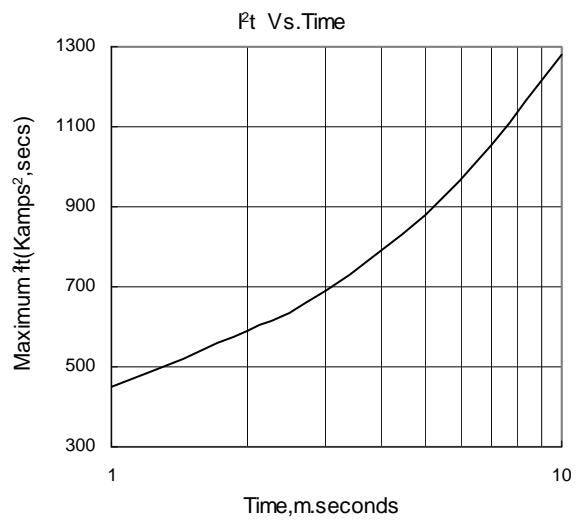


Fig.8

Outline:

