



Diode Modules MDx300



AS ENERGI

$I_{F(AV)}$ 300A
 V_{RRM} 2600~3600V
 I_{FSM} 10 A $\times 10^3$
 I^2t 500A 2 S $\cdot 10^3$

Features:

- Isolated mounting base 3600V~
- 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			300	A
$I_{F(RMS)}$	RMS forward current		150			471	A
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms $V_{RsM}=V_{RRM}+100V$	150	2600		3600	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			45	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$	150			10	KA
I^2t	I^2T for fusing coordination					500	A $^2s \cdot 10^3$
V_{FO}	Threshold voltage		150			0.95	V
r_F	Forward slop resistance					0.70	mΩ
V_{FM}	Peak forward voltage	$I_{FM}=900A$	25			1.85	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled				0.110	°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)	3600				V
F_m	Terminal connection torque(M8)				12		N·m
	Mounting torque(M6)				6		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				1350		g
Outline							

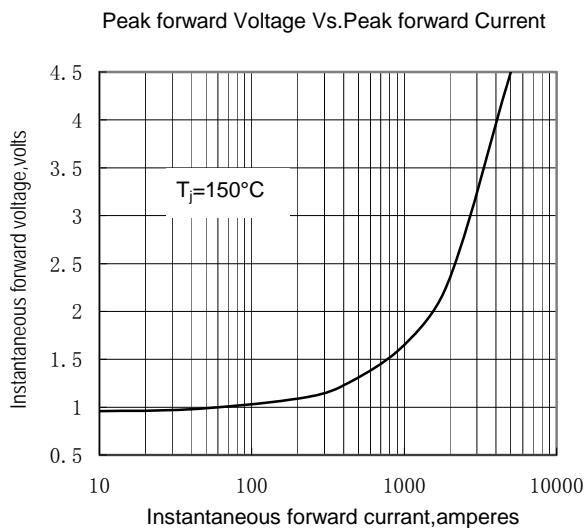


Fig.1

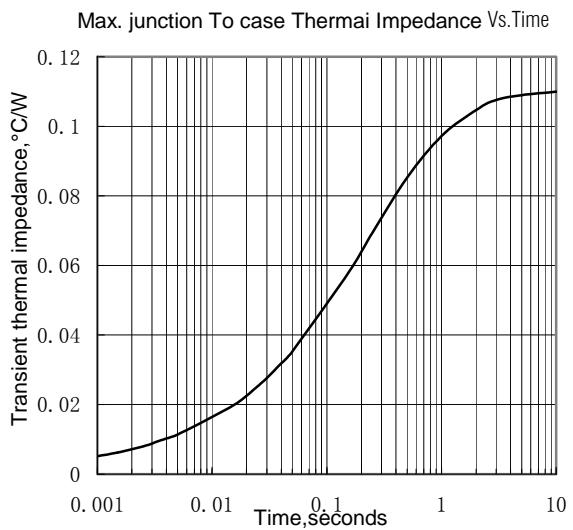


Fig.2

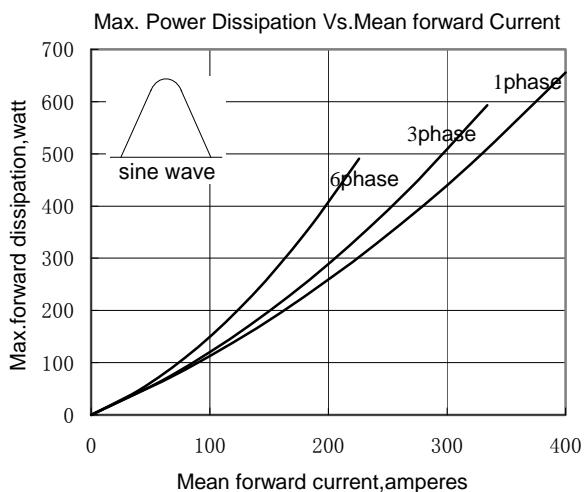


Fig.3

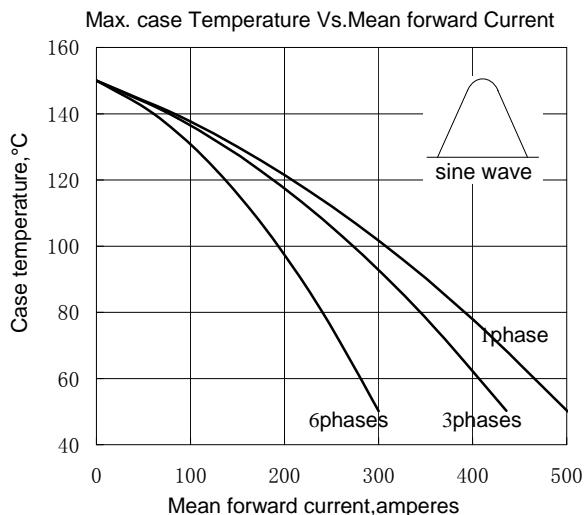


Fig.4

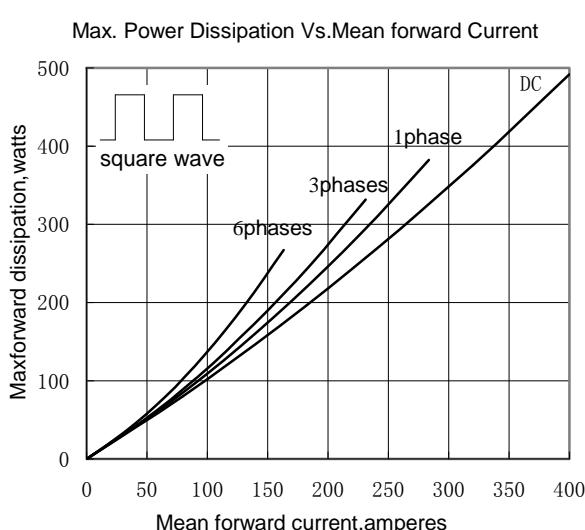


Fig.5

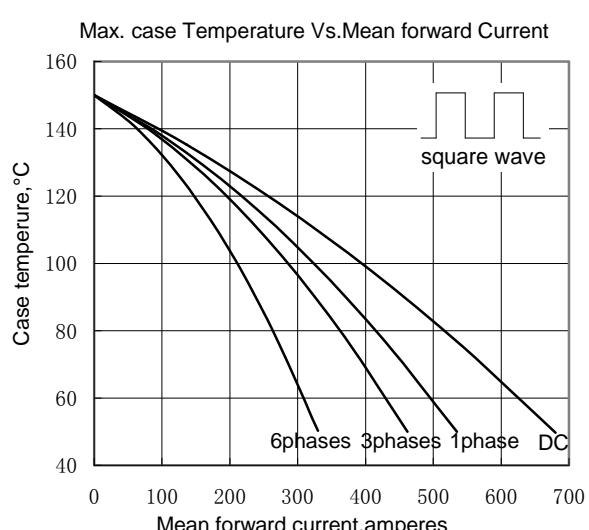


Fig.6

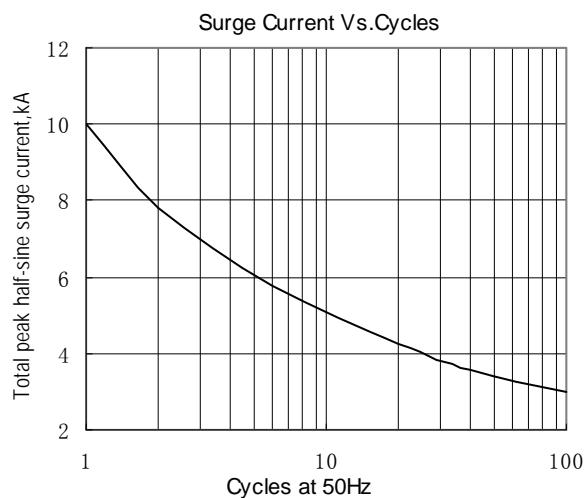


Fig.7

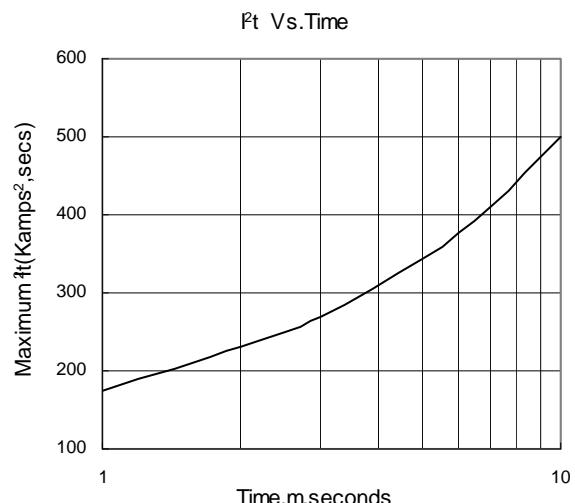


Fig.8

Outline:

