



Diode Modules MDx300



$I_{F(AV)}$ **300A**
 V_{RRM} **600~1800V**
 I_{FSM} **$10A \times 10^3$**
 I^2t **$500A^2 \cdot S \cdot 10^3$**

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 =100°C	150			300	A
$I_{F(RMS)}$	RMS forward current		150			471	A
V_{RRM}	Repetitive peak reverse voltage	$V_{RRM} \text{ tp}=10\text{ms}$ $V_{RSM} = V_{RRM} + 100\text{V}$	150	600		1800	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			20	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			10	KA
I^2t	I^2T for fusing coordination	$V_R = 0.6V_{RRM}$					500
V_{FO}	Threshold voltage		150			0.75	V
r_F	Forward slop resistance						0.55
V_{FM}	Peak forward voltage	$I_{FM} = 900\text{A}$	25			1.35	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(M8)				12		N-m
	Mounting torque(M6)				6		N-m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				860		g
Outline							

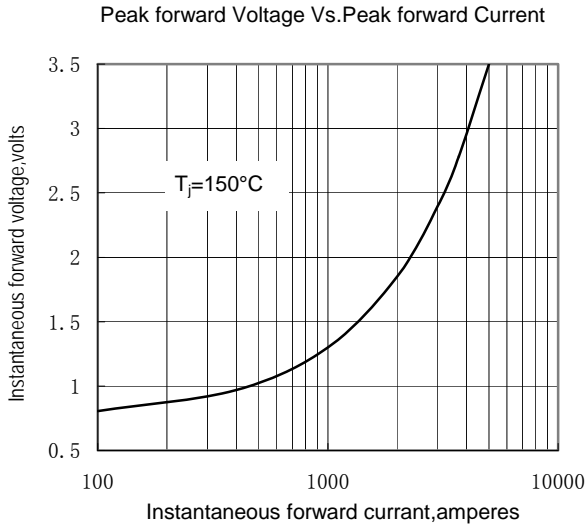


Fig.1

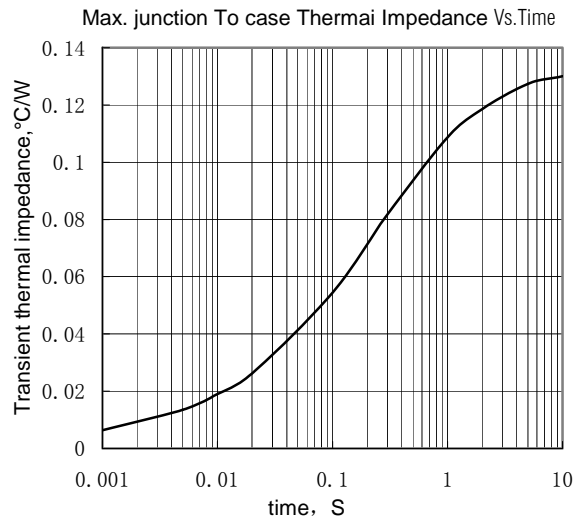


Fig.2

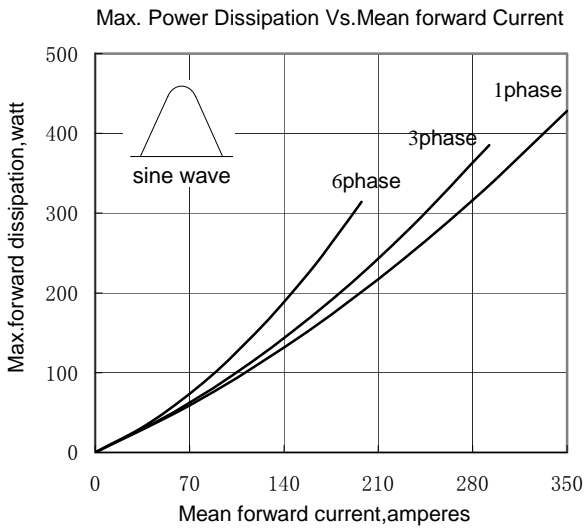


Fig.3

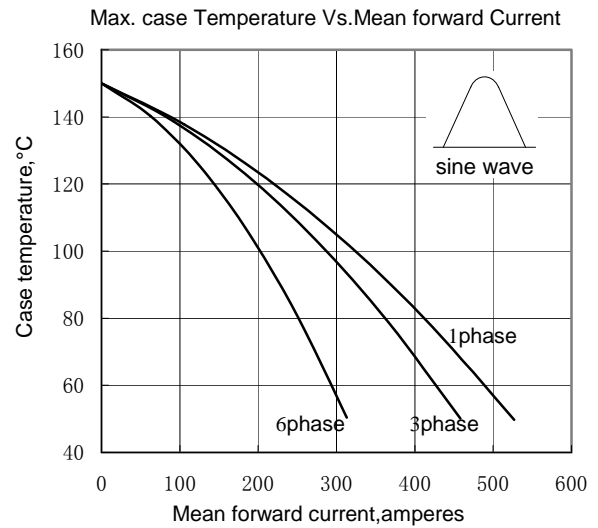


Fig.4

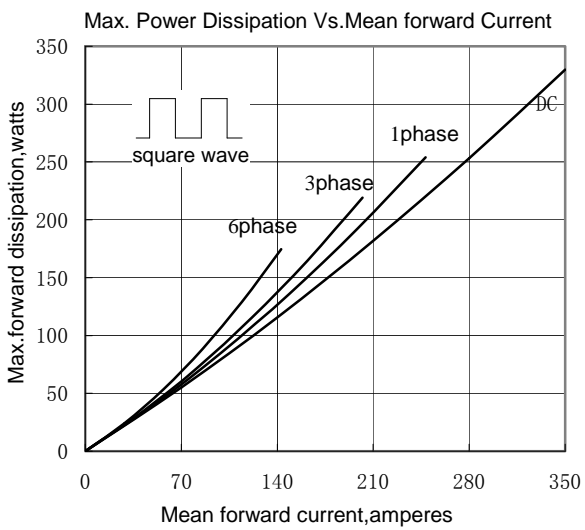


Fig.5

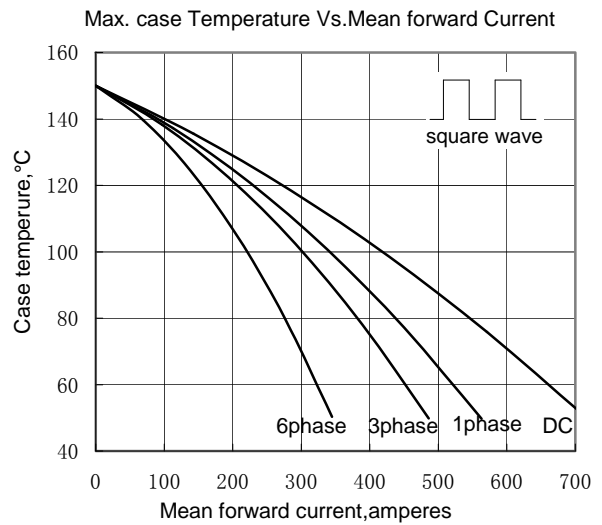


Fig.6

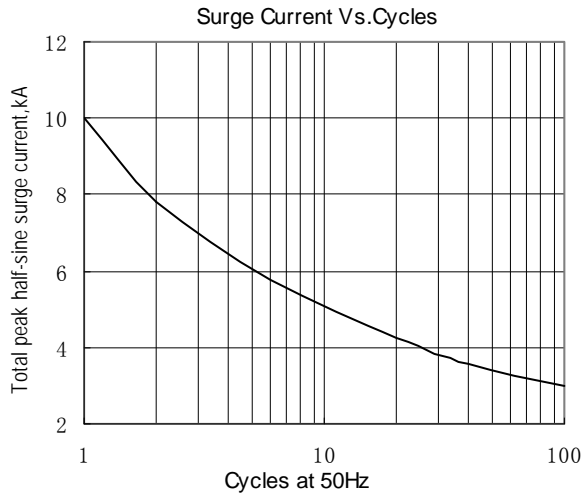


Fig.7

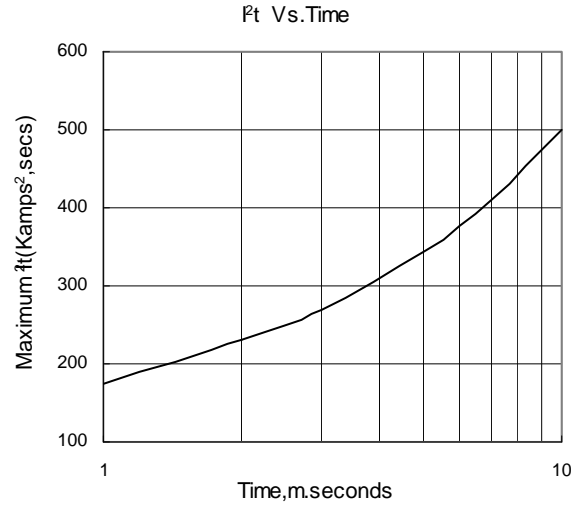


Fig.8

Outline:

