



AS ENERGI

Diode Modules MDx1000



$I_{F(AV)}$	1000A
V_{RRM}	1900~2500V
I_{FSM}	$28A \times 10^3$
I^2t	$3920A^2 S \cdot 10^3$

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	$T_j(^\circ C)$	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=60^\circ C$	150			1000	A
$I_{F(RMS)}$	RMS forward current		150			1570	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			50	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			28	KA
I^2t	I^2T for fusing coordination	$V_R=0.6V_{RRM}$				3920	$A^2s \cdot 10^3$
V_{FO}	Threshold voltage		150			0.82	V
r_F	Forward slop resistance					0.38	$m\Omega$
V_{FM}	Peak forward voltage	$I_{FM}=3000A$	25			2.16	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled				0.048	$^\circ C / W$
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180° sine Single side cooled				0.018	$^\circ C / W$
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}=1mA$ (max)		3000			V
F_m	Terminal connection torque(M12)				14		N·m
	Mounting torque(M8)				12		N·m
T_{stg}	Stored temperature			-40		125	$^\circ C$
W_t	Weight				3600		g
Outline							

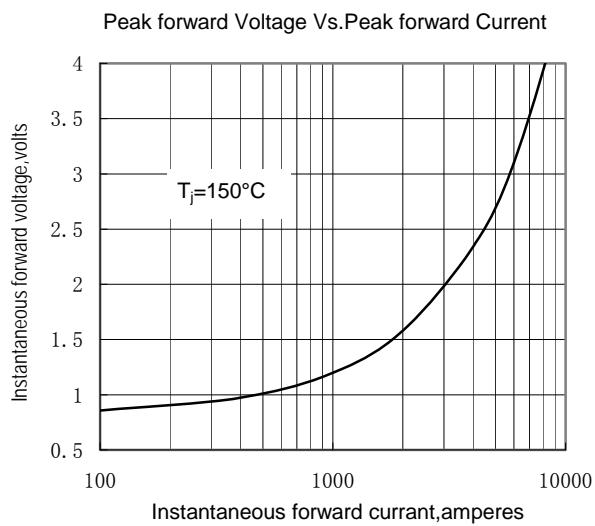


Fig.1

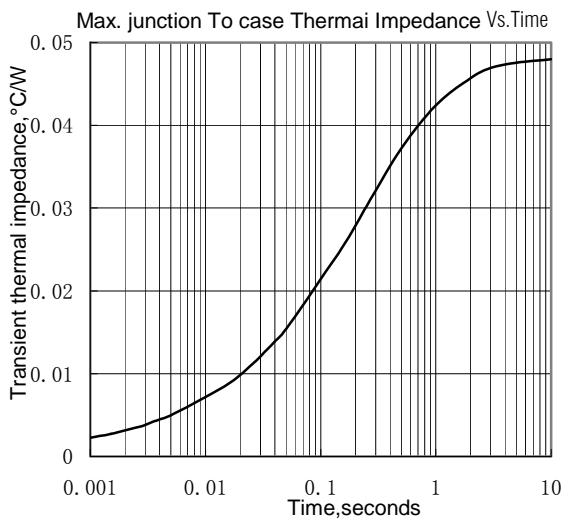


Fig.2

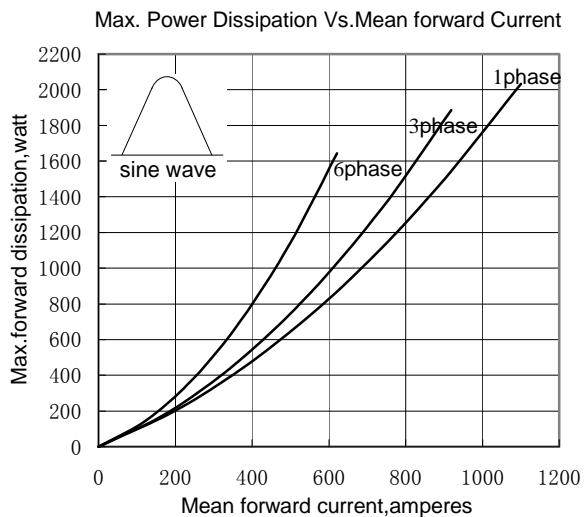


Fig.3

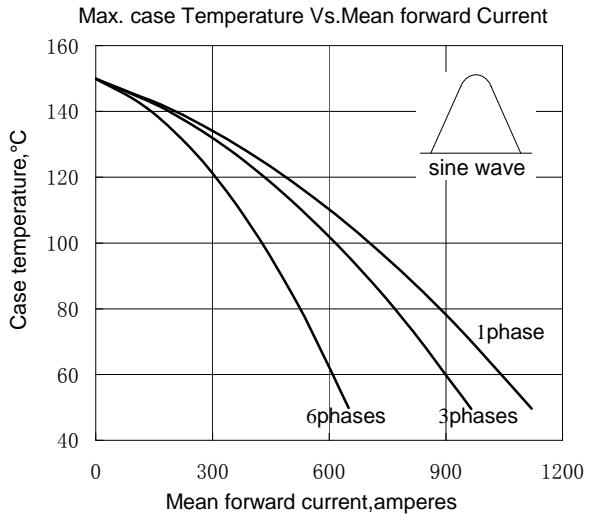


Fig.4

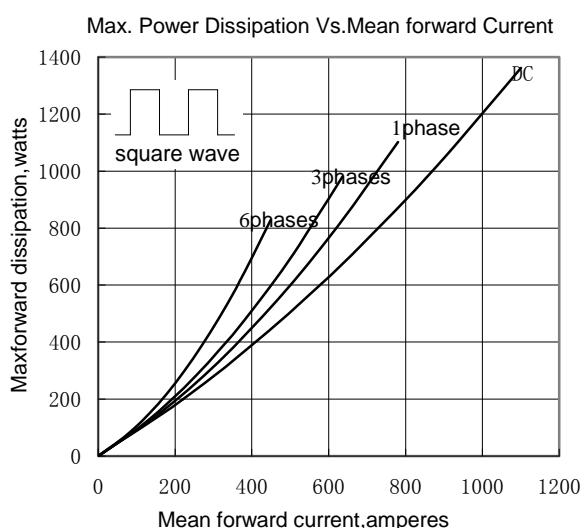


Fig.5

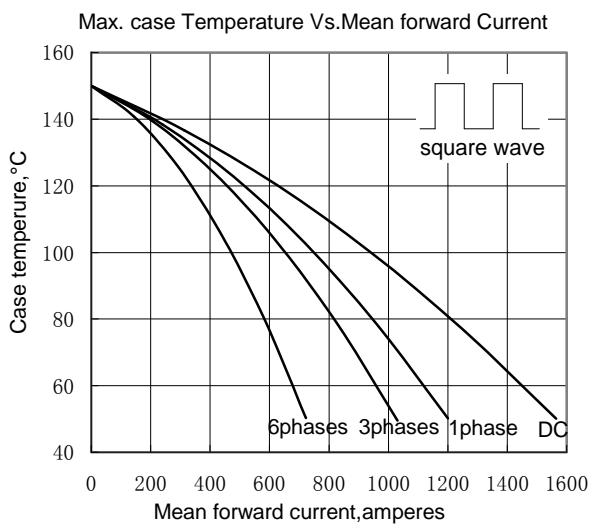


Fig.6

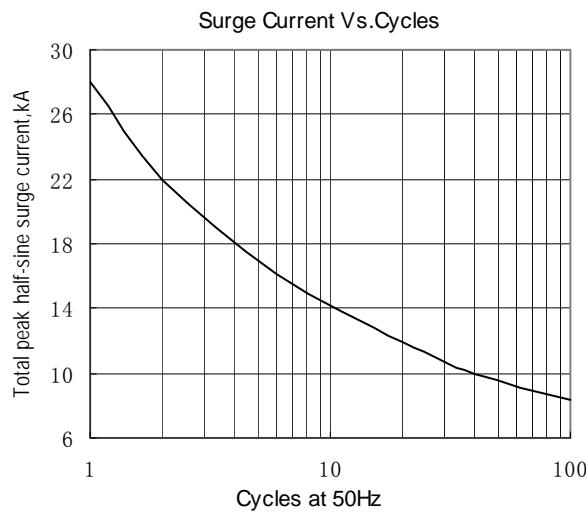


Fig.7

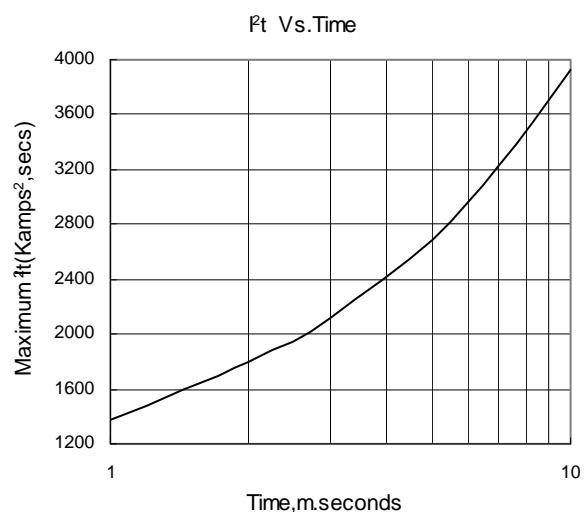


Fig.8

Outline:

