



Diode Modules MDx55



AS ENERGI

$I_{F(AV)}$	55A
V_{RRM}	1900~2500V
I_{FSM}	$1.3A \times 10^3$
I^2t	$8.45A^2 S \times 10^3$

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, $T_c=100^{\circ}C$	150			55	A
$I_{F(RMS)}$	RMS forward current		150			86	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			8	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			1.30	KA
I^2t	I^2T for fusing coordination	$V_R=0.6V_{RRM}$				8.45	$A^2s \times 10^3$
V_{FO}	Threshold voltage		150			0.85	V
r_F	Forward slop resistance					3.76	$m\Omega$
V_{FM}	Peak forward voltage	$I_{FM}=170A$	25			1.55	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled				0.680	$^{\circ}C / W$
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180° sine Single side cooled				0.2	$^{\circ}C / W$
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min, $I_{iso}:1mA(max)$		3000			V
F_m	Terminal connection torque(M5)				4		$N \cdot m$
	Mounting torque(M6)				6		$N \cdot m$
T_{stg}	Stored temperature			-40		125	$^{\circ}C$
W_t	Weight				115		g
Outline							

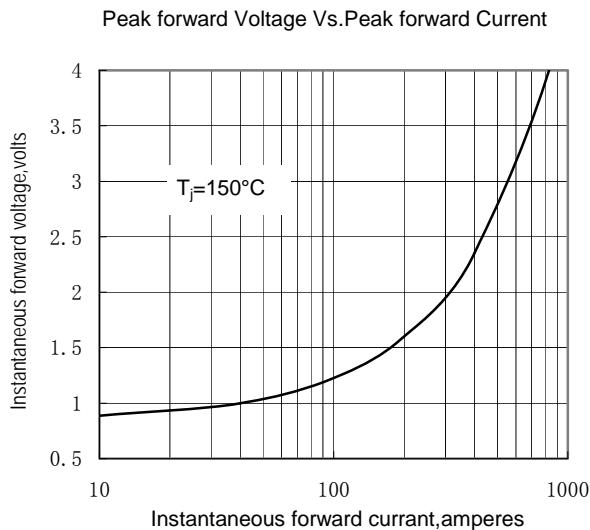


Fig.1

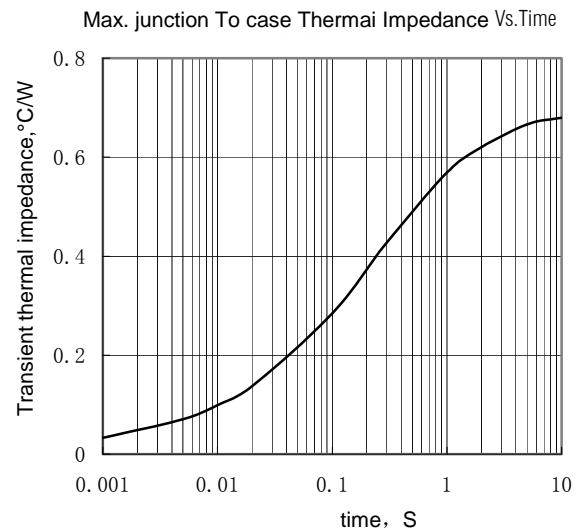


Fig.2

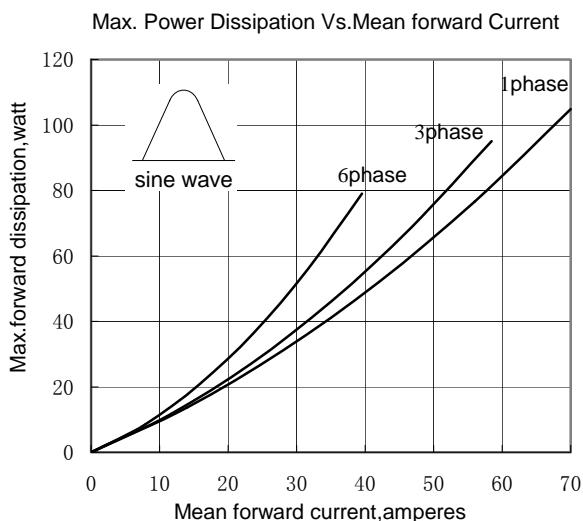


Fig.3

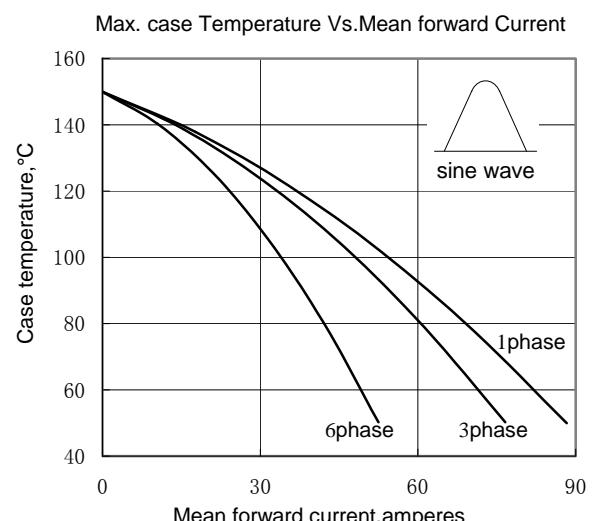


Fig.4

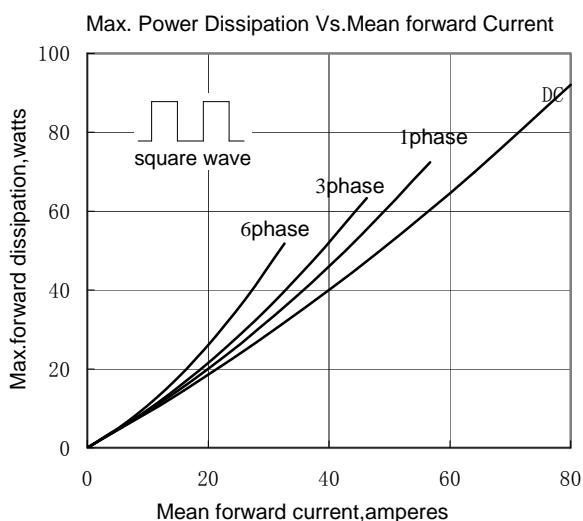


Fig.5

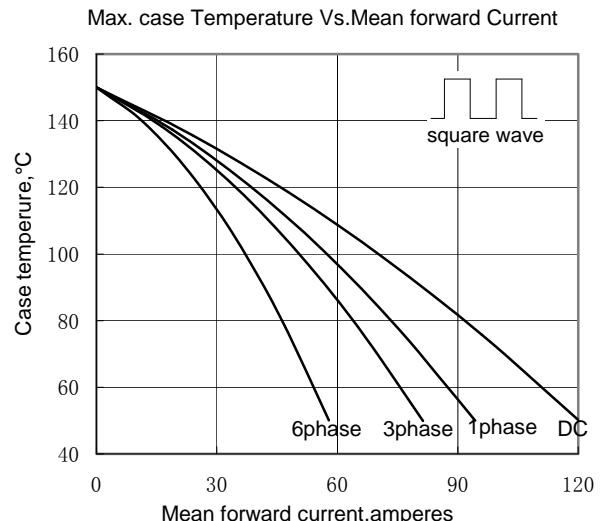


Fig.6

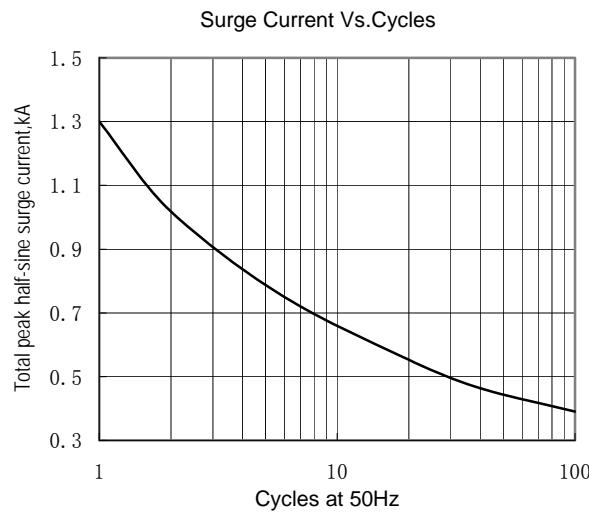


Fig.7

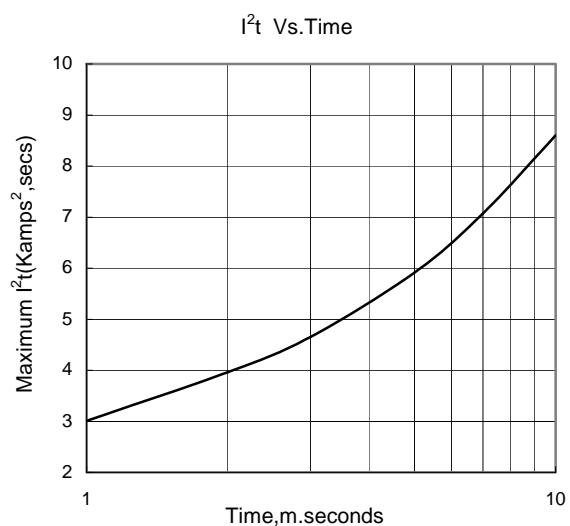


Fig.8

Outline:

