



### Features:

- Isolated mounting base 3000V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

### Typical Applications

- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$V_{RSM}$	$V_{RRM}$	Type & Outline
900V	800V	MDx40-08-223F3
1100V	1000V	MDx40-10-223F3
1300V	1200V	MDx40-12-223F3
1500V	1400V	MDx40-14-223F3
1700V	1600V	MDx40-16-223F3
1900V	1800V	MDx40-18-223F3

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, $T_c=100^\circ\text{C}$	150			40	A
$I_F$ (RMS)	RMS forward current		150			63	A
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	150			8	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	150			1.00	KA
$I^2t$	$I^2T$ for fusing coordination	$V_R=0.6V_{RRM}$				5.0	$\text{A}^2\text{s} \times 10^3$
$V_{FO}$	Threshold voltage		150			0.80	V
$r_F$	Forward slop resistance					5.57	$\text{m}\Omega$
$V_{FM}$	Peak forward voltage	$I_{FM}=120\text{A}$	25			1.55	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine Single side cooled per chip				0.900	$^\circ\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180° sine Single side cooled per chip				0.2	$^\circ\text{C}/\text{W}$
$V_{iso}$	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}:1\text{mA}(\text{max})$		3000			V
$F_m$	Terminal connection torque(M5)				4.0		$\text{N}\cdot\text{m}$
	Mounting torque(M6)				6.0		$\text{N}\cdot\text{m}$
$T_{stg}$	Stored temperature			-40		125	$^\circ\text{C}$
$W_t$	Weight				160		g
Outline				223F3			

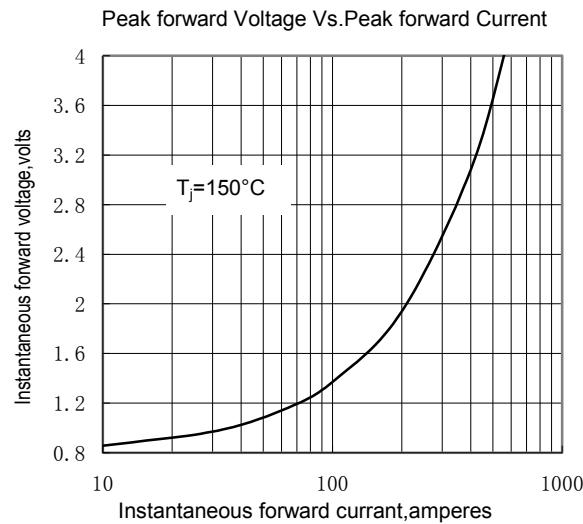


Fig.1

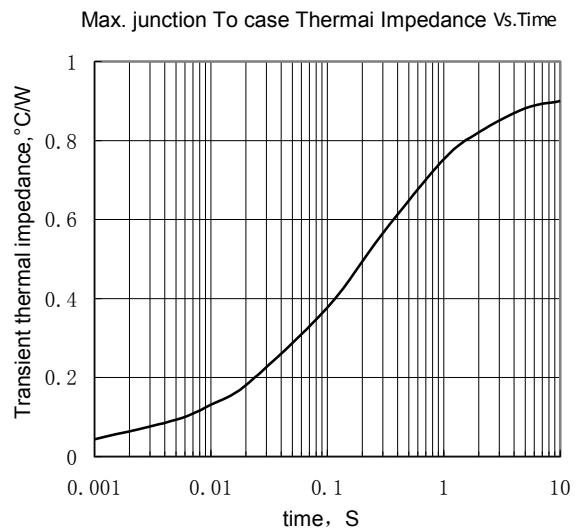


Fig.2

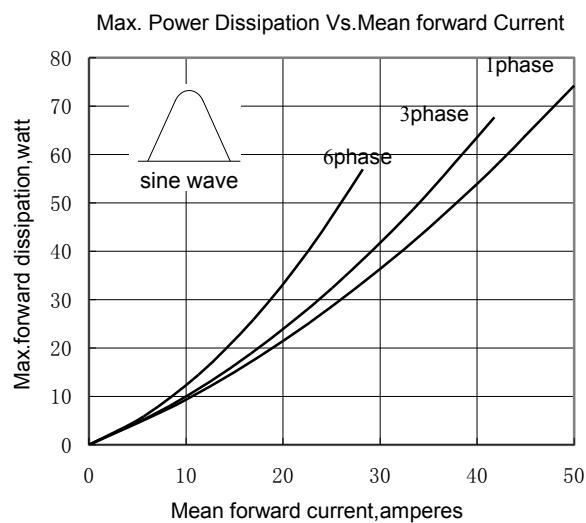


Fig.3

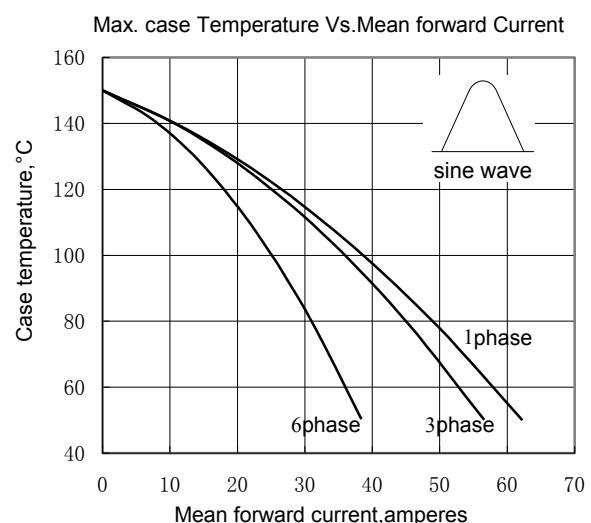


Fig.4

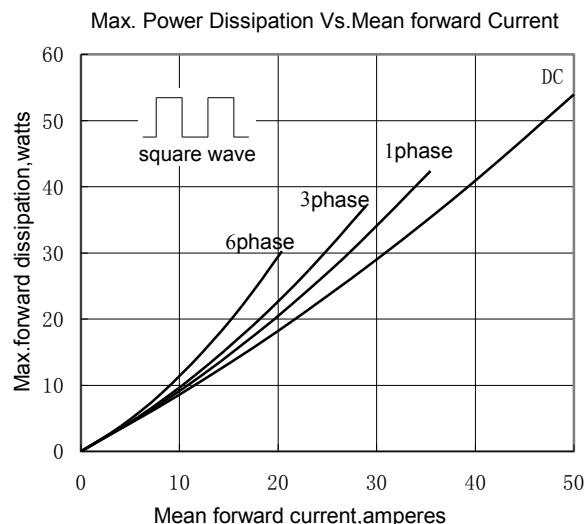


Fig.5

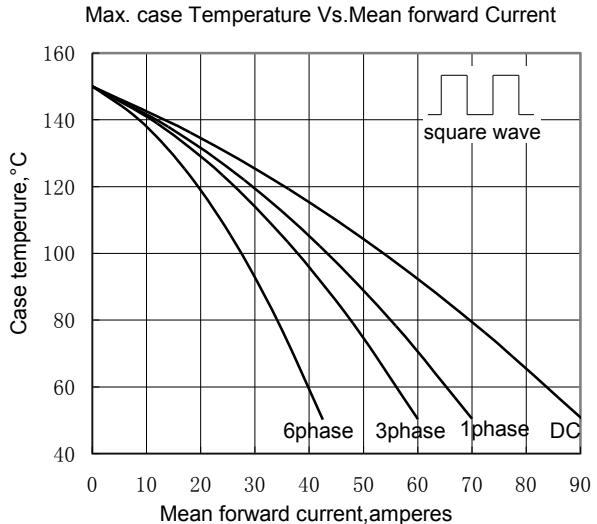


Fig.6

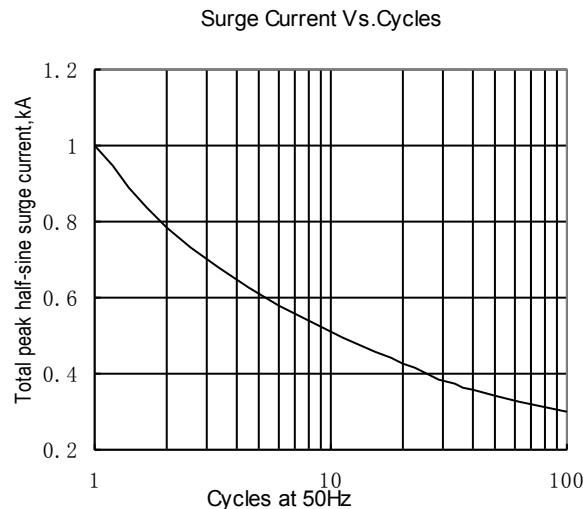


Fig.7

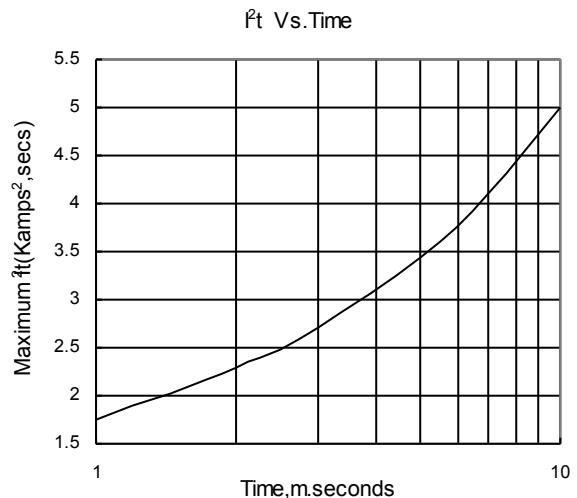


Fig.8

## Outline:

