

Features :

- Isolated mounting base 2500V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

Typical Applications

- Inverter
- Inductive heating
- Chopper

V_{RSM}	V_{RRM}	品名
900V	800V	Mx200DF80
1100V	1000V	Mx200DF100
1300V	1200V	Mx200DF120
1500V	1400V	Mx200DF140
1700V	1600V	Mx200DF160
1900V	1800V	Mx200DF180

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_J(^{\circ}\text{C})$	VALUE			UNIT
				Min.	Typ.	Max.	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=100^{\circ}\text{C}$	150			200	A
$I_F(\text{RMS})$	RMS forward current					314	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			40	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$	150			5.5	kA
I^{2t}	I^{2t} for fusing coordination					151	$\text{A}^2\text{s} \times 10^3$
V_{FO}	Threshold voltage		150			0.95	V
r_F	Forward slope resistance					0.90	$\text{m}\Omega$
V_{FM}	Peak forward voltage	$I_{FM}=600\text{A}$	25			1.55	V
t_{rr}	Reverse recovery time	$I_{FM}=200\text{A}, t_p=2000\mu\text{s}, -di/dt=20\text{A}/\mu\text{s}, V_R=50\text{V}$	150			4.0	μs
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Single side cooled per chip				0.180	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	D.C. Single side cooled per chip				0.040	$^{\circ}\text{C}/\text{W}$
F_m	Terminal connection torque(M8)				12.0		N·m
	Mounting torque(M6)				6.0		N·m
V_{iso}	Isolation voltage	50Hz,R.M.S., $t=1\text{min}, I_{iso}:1\text{mA(MAX)}$		2500			V
T_{vj}	Junction temperature			-40		140	$^{\circ}\text{C}$
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				810		g
Outline	M03						

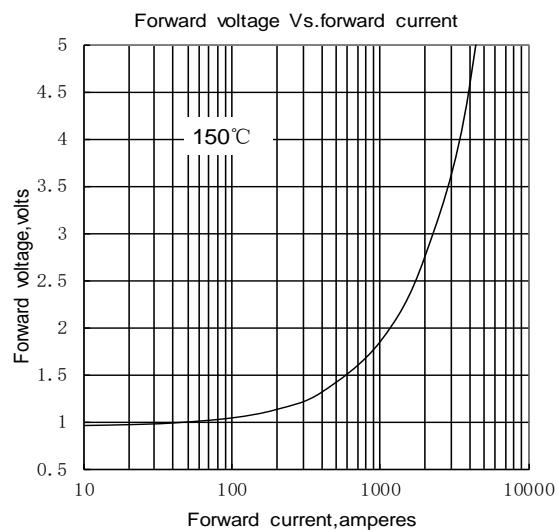


Fig. 1

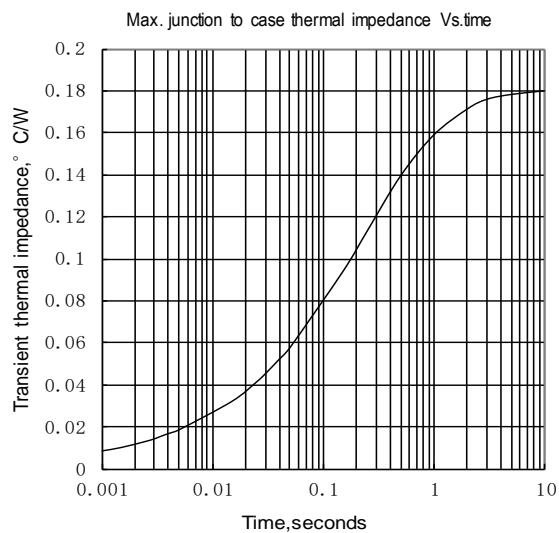


Fig.2

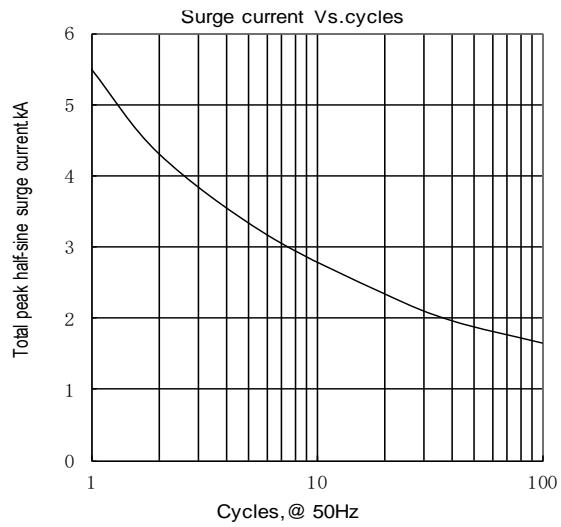
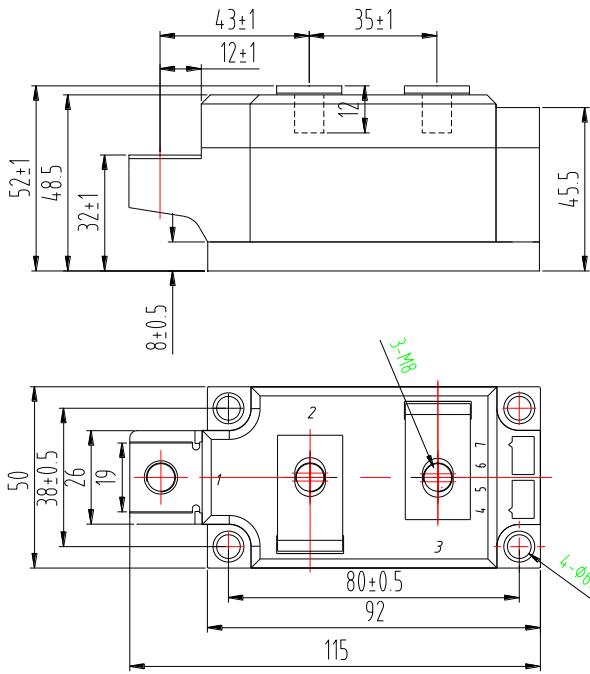
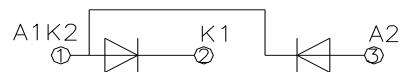


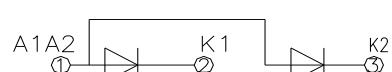
Fig.3



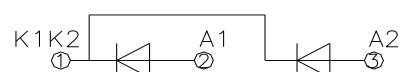
MD150DF**



MR150DF**



MC150DF**



Unmarked dimensional tolerance : $\pm 0.5\text{mm}$

NIps reserves the right to change specifications without notice.