NIPS Fast Recovery Diode Modules **MD200DF** MR200DF** MC200DF****

Features：

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

Typical Applications

- Inverter
- Inductive heating
- Chopper

V_{RSM}	V_{RRM}	品 名
700V	600V	Mx200DF60
900V	800V	Mx200DF80
1100V	1000V	Mx200DF100
1300V	1200V	Mx200DF120
1500V	1400V	Mx200DF140
1700V	1600V	Mx200DF160
1900V	1800V	Mx200DF180

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=85°C	140			200	A
$I_{F\ (RMS)}$	RMS forward current					314	A
I_{RRM}	Repetitive peak current	at V_{RRM}	140			40	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}	140			5.5	kA
I^2t	I^2t for fusing coordination					151	A^2s*10^3
V_{FO}	Threshold voltage		140			0.95	V
r_F	Forward slope resistance					0.90	mΩ
V_{FM}	Peak forward voltage	I_{FM}=600A	25			1.55	V
t_{rr}	Reverse recovery time	I_{FM}=200A,tp=4000μs, -di/dt=20A/μs,V_R=50V	140		3.0		μs
			25		2.0		μs
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Single side cooled per chip				0.180	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	D.C. Single side cooled per chip				0.040	°C /W
F_m	Terminal connection torque(M8)			10.0		12.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(MAX)		3000			V
T_{vj}	Junction temperature			-40		140	°C
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				770		g
Outline	M03						

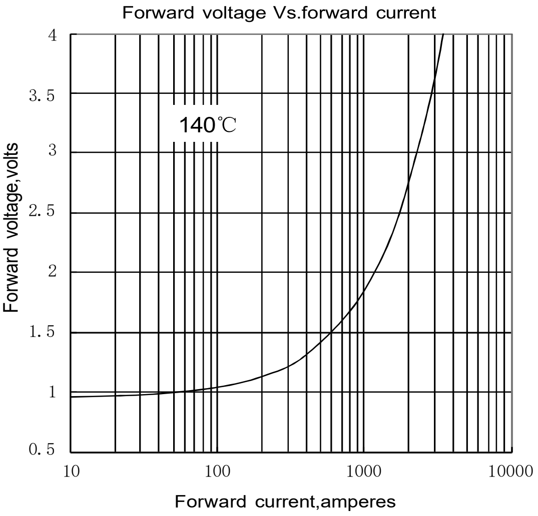


Fig.1

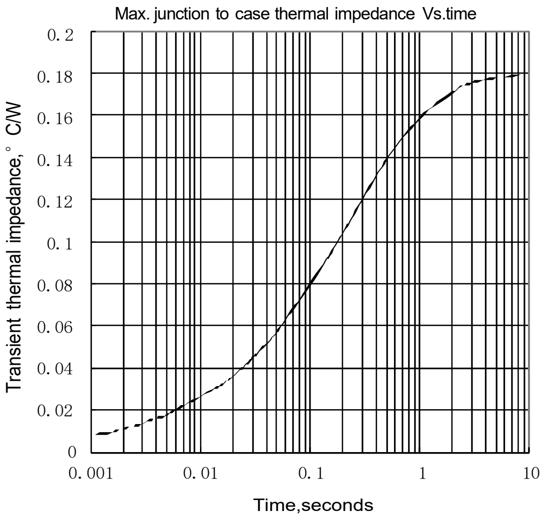


Fig.2

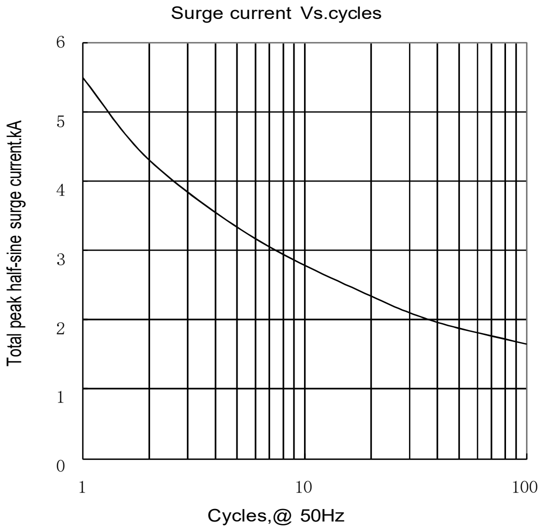
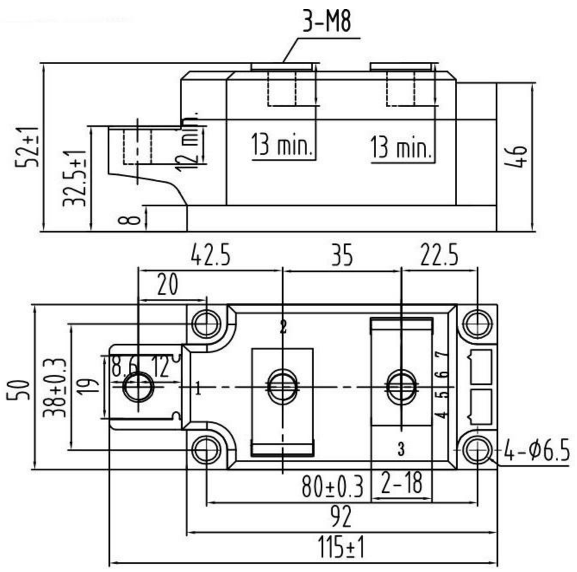
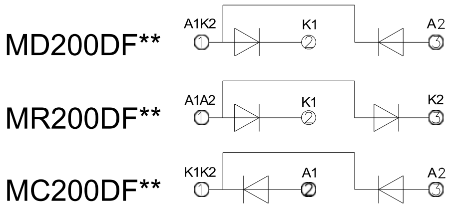


Fig.3

Outline:





Unmarked dimensional tolerance：±0.5mm

NIPS reserves the right to change specifications without notice.