

Nips Fast Recovery Diode Modules MD300DF**W MR300DF**W MC300DF**W

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 _{RPM}	品名
900V	800V	Mx300DF80W
1100V	1000V	Mx300DF100W
1300V	1200V	Mx300DF120W
1500V	1400V	Mx300DF140W
1700V	1600V	Mx300DF160W

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min.	Typ.	Max.	
I _{F(AV)}	Mean forward current	180° half sine wave 50Hz Single side cooled, T _C =60°C	150			300	A
I _{F(RMS)}	RMS forward current					471	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			6.00	kA
I ² t	I ² t for fusing coordination					180	A ² s*10 ³
V _{FO}	Threshold voltage		150			1.05	V
r _F	Forward slope resistance					1.20	mΩ
V _{FM}	Peak forward voltage	I _{FM} =900A	25			2.20	V
t _{rr}	Reverse recovery time	I _{FM} =300A, t _p =2000μs, -di/dt=20A/μs, V _R =50V	150		3.0		μs
R _{th(j-c)}	Thermal resistance Junction to case	D.C. Single side cooled per chip				0.160	°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)				12.0		N·m
	Mounting torque(M6)				6.0		N·m
T _{vj}	Junction temperature			-40		150	°C
T _{stg}	Stored temperature			-40		150	°C
W _t	Weight				1055		g
Outline	M13						

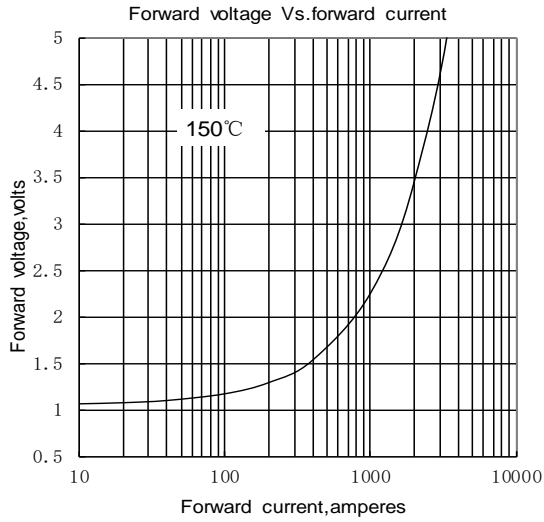


Fig.1

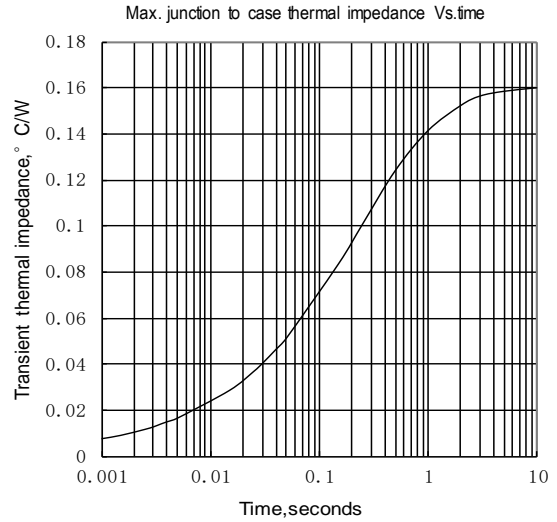


Fig.2

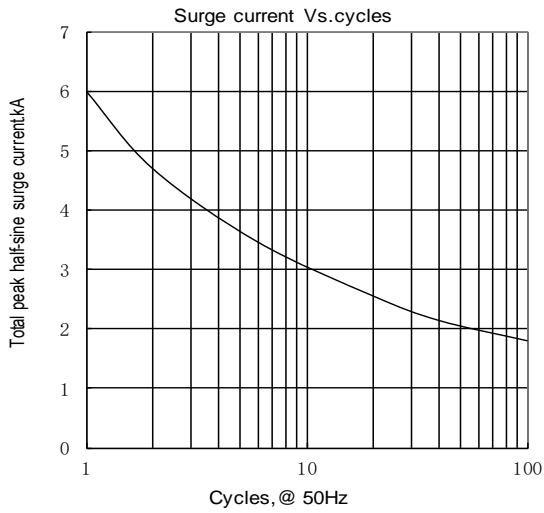
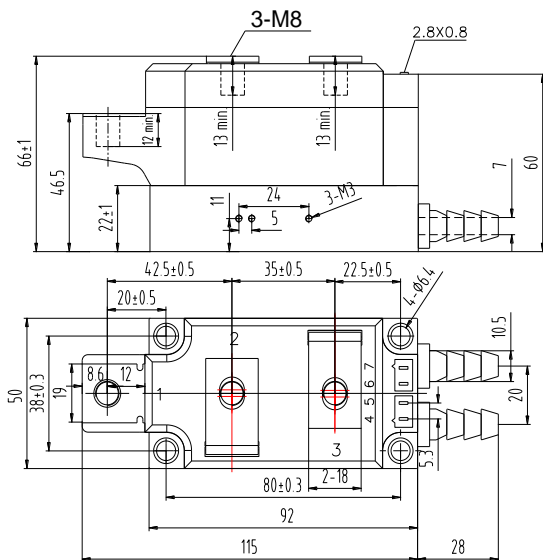
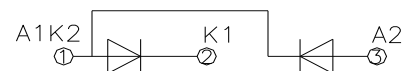


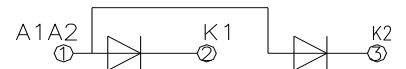
Fig.3



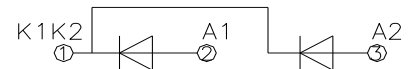
MD300DF**W



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MC300DF**W



Unmarked dimensional tolerance : ±0.5mm