

# Nips Diode Modules (Water Cooling) MD600D\*\*W MC600D\*\*W MR600D\*\*W

## Features :

- Isolated mounting base 4000V~
- 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 <sub>RSM</sub>	V <sub>RRM</sub>	品名
2700V	2600V	Mx600D260W
2900V	2800V	Mx600D280W
3100V	3000V	Mx600D300W
3300V	3200V	Mx600D320W
3500V	3400V	Mx600D340W
3700V	3600V	Mx600D360W

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min.	Typ.	Max.	
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Single side water cooled, T <sub>C</sub> =60°C	150			600	A
I <sub>F(RMS)</sub>	RMS forward current		150			942	A
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	150			45	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave V <sub>R</sub> =0.6V <sub>RRM</sub>	150			10.0	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination					500	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		150			0.95	V
r <sub>F</sub>	Forward slope resistance					0.91	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =1800A	25			2.79	V
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	D.C. Single side cooled per chip				0.065	°C/W
R <sub>th(c-h)</sub>	Thermal resistance case to heat sink	D.C. Single side cooled per chip				0.024	°C/W
V <sub>iso</sub>	Isolation voltage	50Hz,R.M.S,t=1min, I <sub>iso</sub> :1mA(max)		4000			V
F <sub>m</sub>	Terminal connection torque(M12)				14.0		N·m
	Mounting torque(M8)				12.0		N·m
T <sub>stg</sub>	Stored temperature			-40		125	°C
W <sub>t</sub>	Weight				3460		g
Outline	M15						

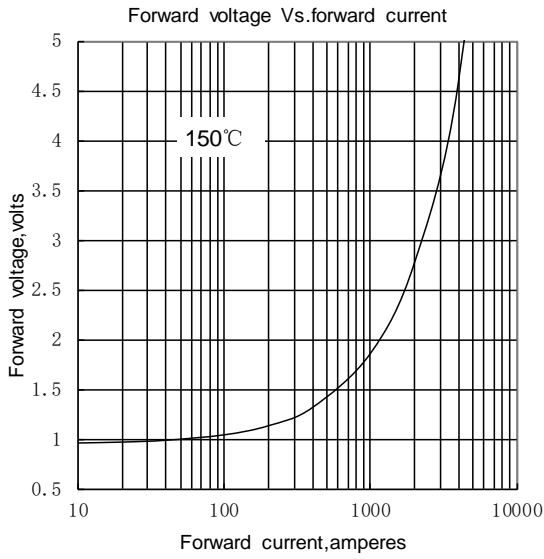


Fig.1

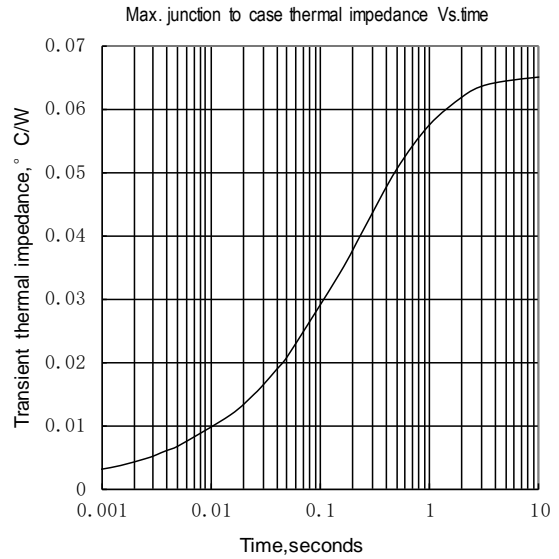


Fig.2

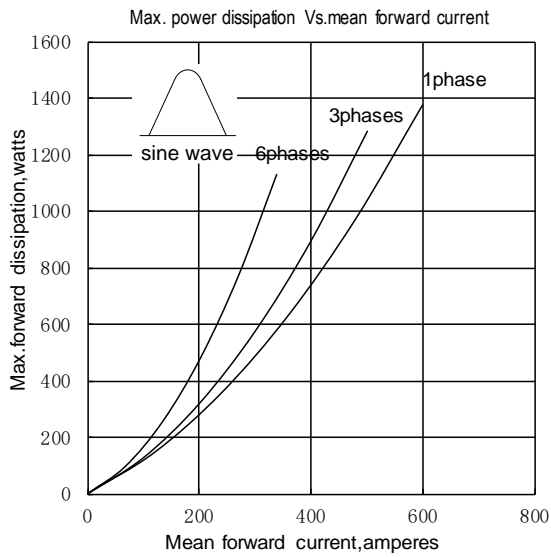


Fig.3

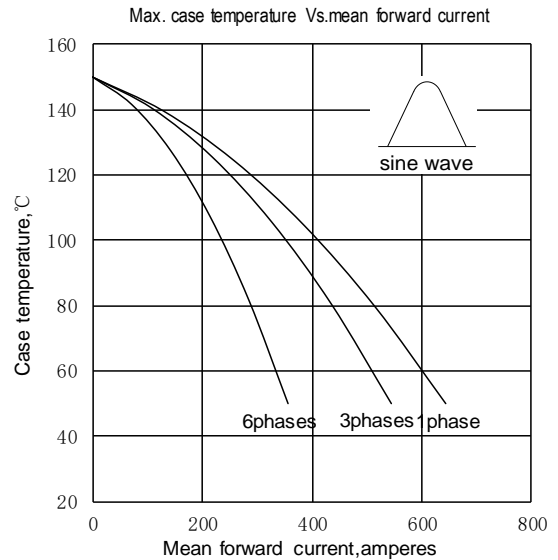


Fig.4

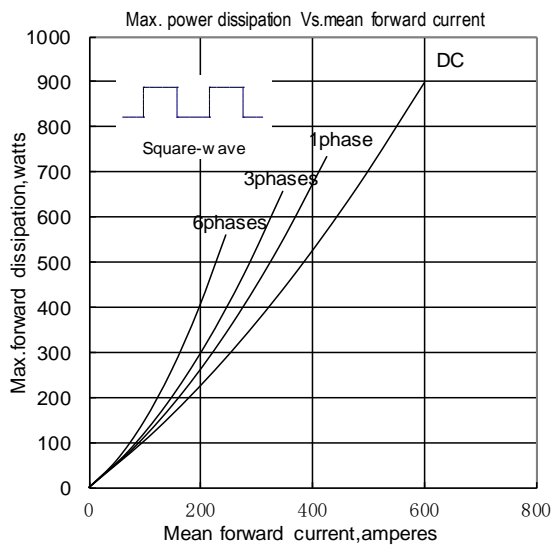


Fig.5

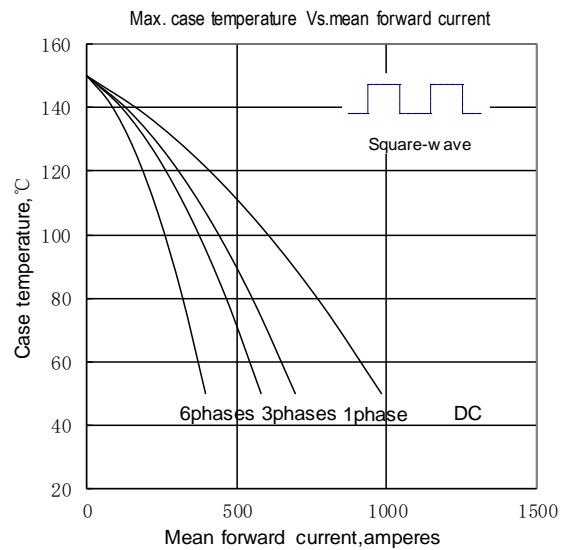


Fig.6

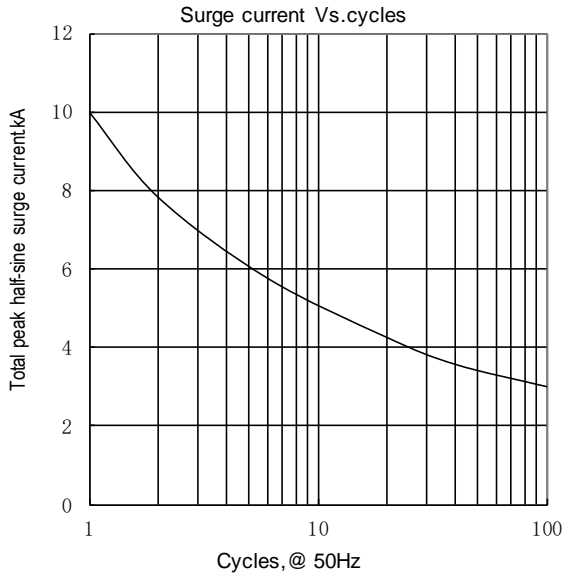
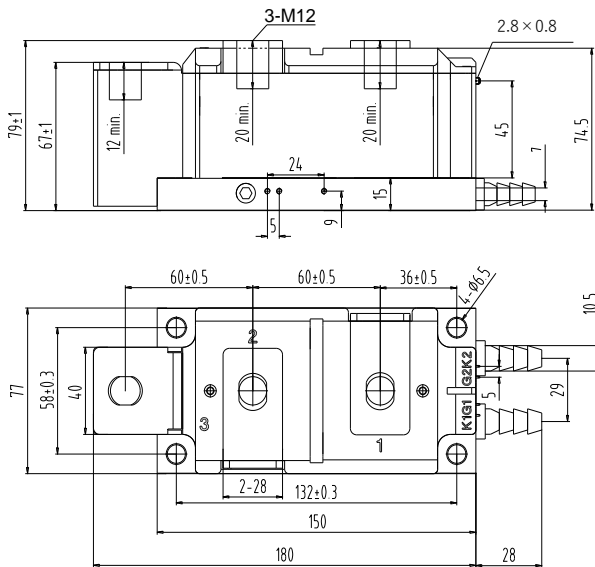


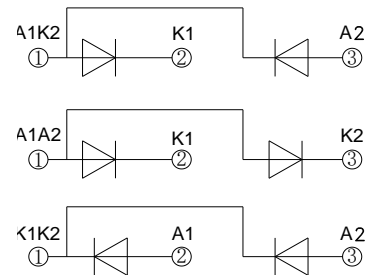
Fig.7



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Unmarked dimensional tolerance : ±0.5mm