

**Features :**

- Isolated mounting base 2500V~
- 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

Part No. Mx330T**W	
V <sub>RRM</sub> ,V <sub>DRM</sub>	品名
800V	Mx330T80W
1000V	Mx330T100W
1200V	Mx330T120W
1400V	Mx330T140W
1600V	Mx330T160W
1800V	Mx330T180W

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>T(AV)</sub>	Mean on-state current	180° half sine wave 50Hz Single side cooled, T <sub>c</sub> =62°C	125			330	A
I <sub>T(RMS)</sub>	RMS on-state current					518	A
V <sub>DRM</sub> /V <sub>RRM</sub>	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms	125	800		1800	V
I <sub>DRM</sub> /I <sub>RRM</sub>	Repetitive peak current	at V <sub>DRM</sub> at V <sub>RRM</sub>	125			35	mA
I <sub>TSM</sub>	Surge on-state current	10ms half sine wave	125			10	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination	V <sub>R</sub> =60%V <sub>RRM</sub>				500	10 <sup>3</sup> A <sup>2</sup> s
V <sub>TO</sub>	Threshold voltage		125			0.90	V
r <sub>T</sub>	On-state slope resistance					0.85	mΩ
V <sub>TM</sub>	Peak on-state voltage	I <sub>TM</sub> =900A	25			1.90	V
dv/dt	Critical rate of rise of off-state voltage	V <sub>DM</sub> =67%V <sub>DRM</sub>	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A, t <sub>r</sub> ≤0.5μs Repetitive	125			100	A/μs
I <sub>GT</sub>	Gate trigger current	V <sub>A</sub> =12V, I <sub>A</sub> =1A	25	30		200	mA
V <sub>GT</sub>	Gate trigger voltage			0.8		3.0	V
I <sub>H</sub>	Holding current			20		200	mA
V <sub>GD</sub>	Non-trigger gate voltage	V <sub>DM</sub> =67%V <sub>DRM</sub>	125			0.2	V
I <sub>GD</sub>	Non-trigger gate current	V <sub>DM</sub> =67%V <sub>DRM</sub>	125			10	mA
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	Single side cooled. per chip. DC				0.112	°C/W
R <sub>th(c-w)</sub>	Thermal resistance case to water	Single side cooled. per chip. (5L/min)				0.056	°C/W
V <sub>iso</sub>	Isolation voltage	50Hz, R.M.S, t=1min, I <sub>iso</sub> : 1mA(Max)		2500			V
F <sub>m</sub>	Terminal connection torque(M8)			8.0		12.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
T <sub>vj</sub>	Junction temperature			-40		125	°C
T <sub>stg</sub>	Stored temperature			-40		125	°C
T <sub>water</sub>	Water temperature	Water flow=5L/min		-		30	°C
-	Water Pressure loss				21		kPa
W <sub>t</sub>	Weight				1340		g
Outline	M13						

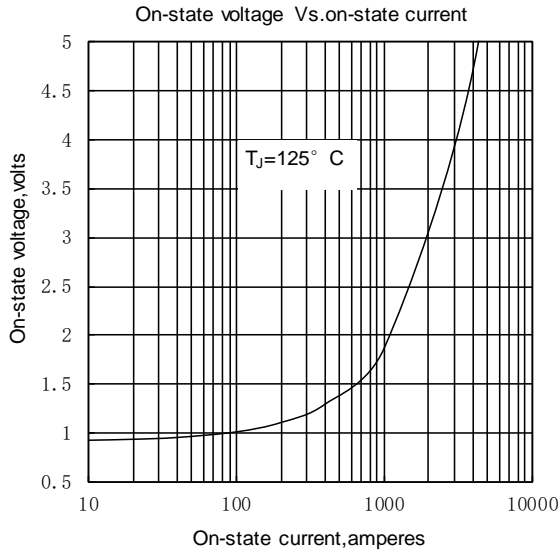


Fig.1

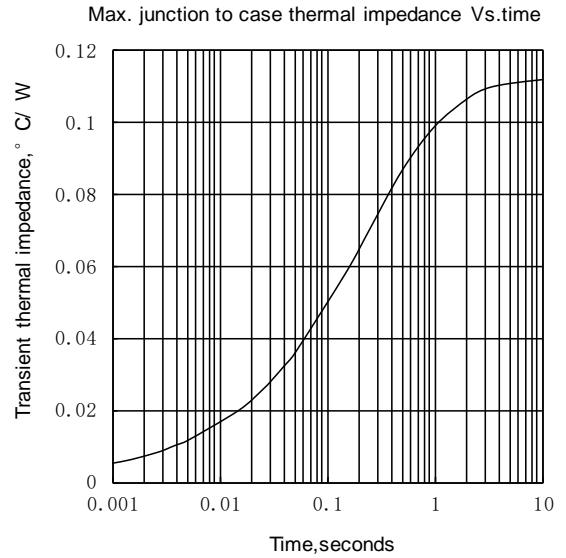


Fig.2

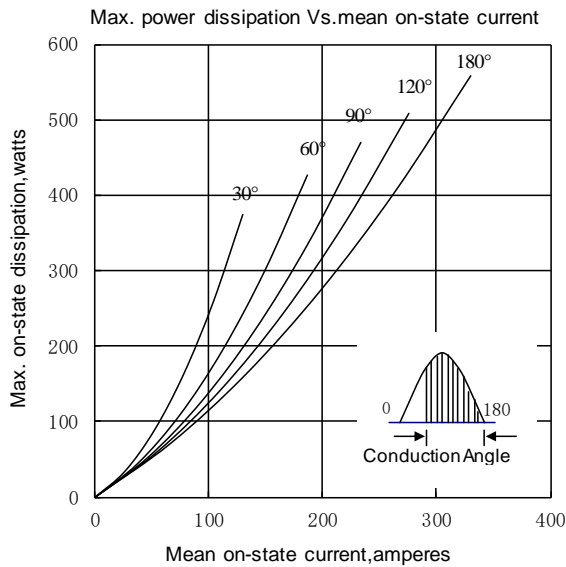


Fig.3

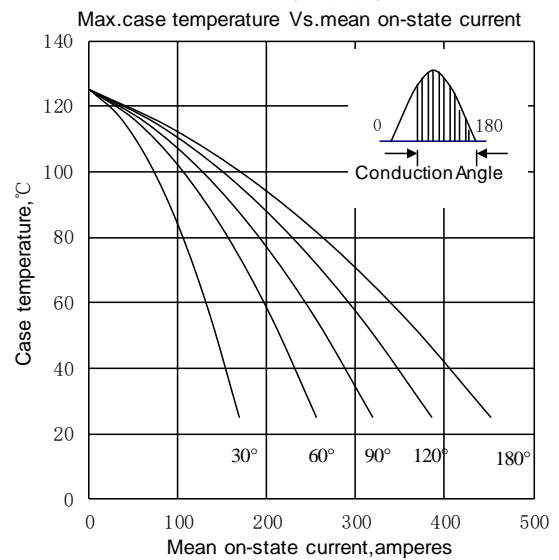


Fig.4

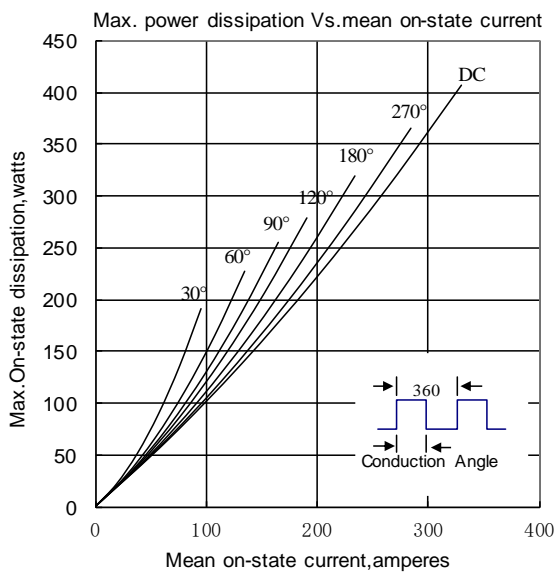


Fig.5

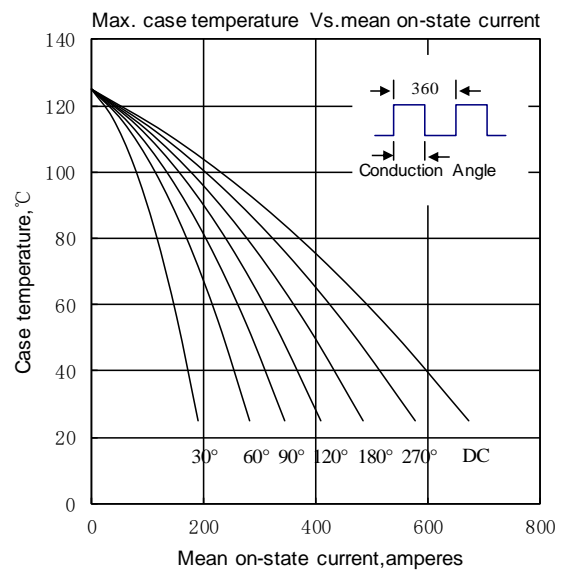


Fig.6

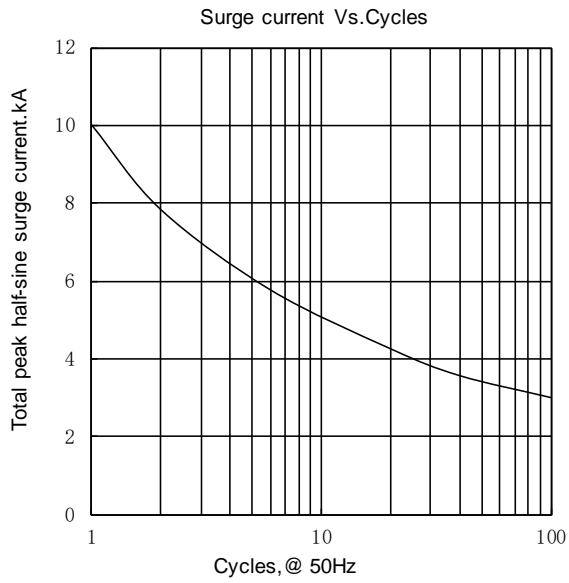


Fig.7

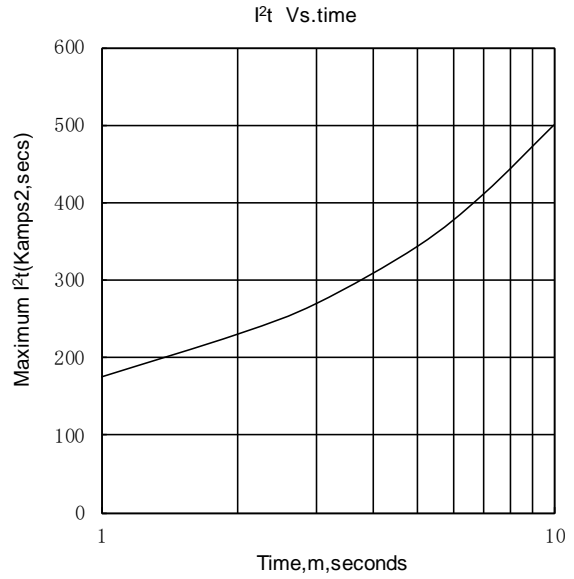


Fig.8

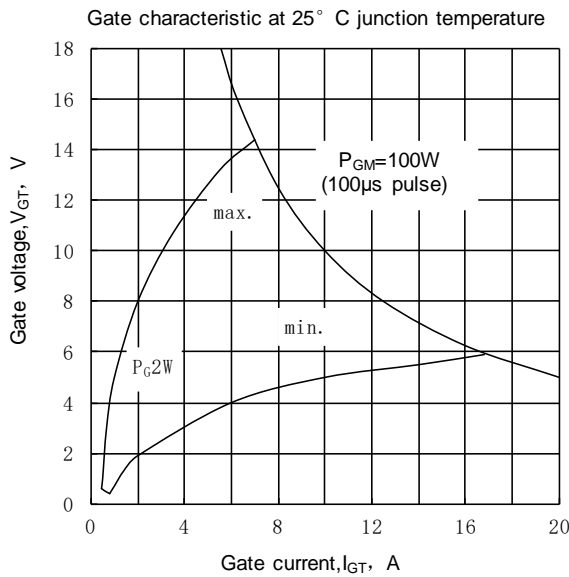


Fig.9

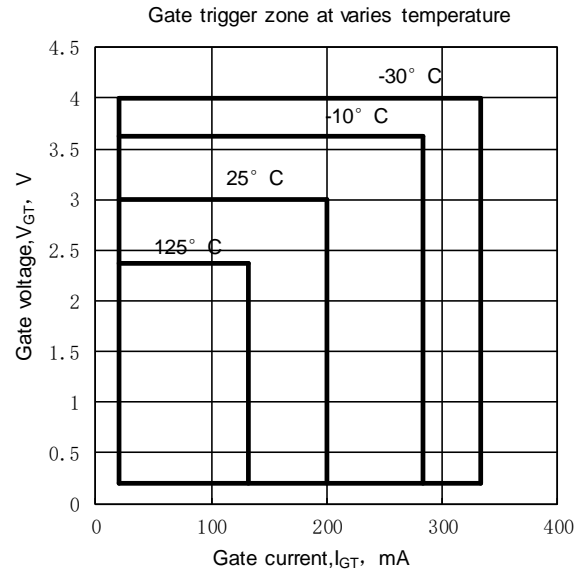


Fig.10

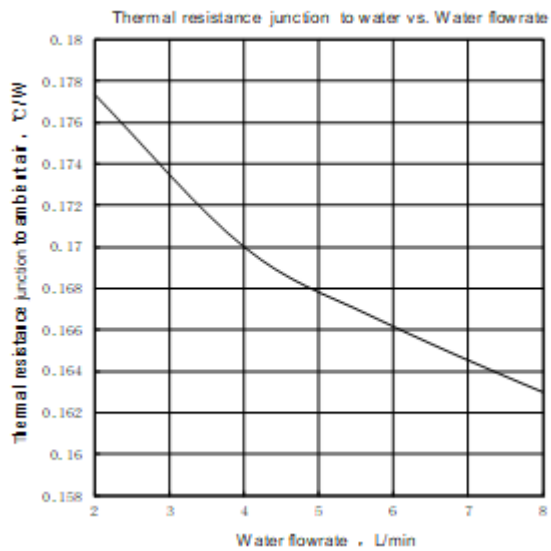


Fig.11

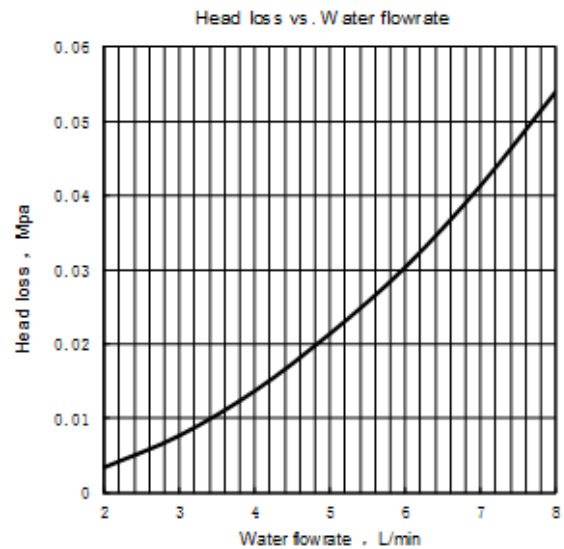
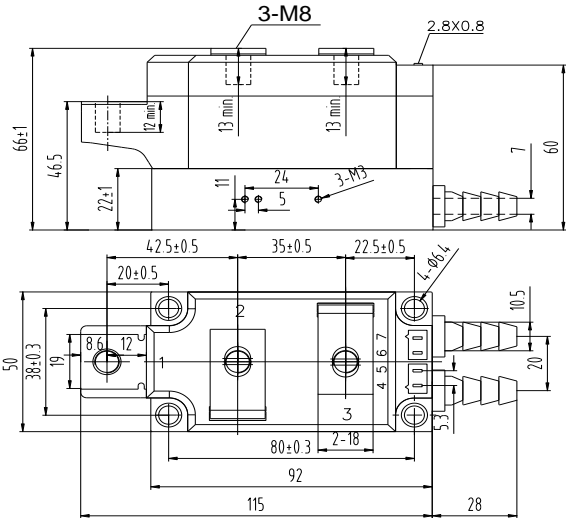


Fig.12



MD330T\*\*W

MR330T\*\*W

MC330T\*\*W

