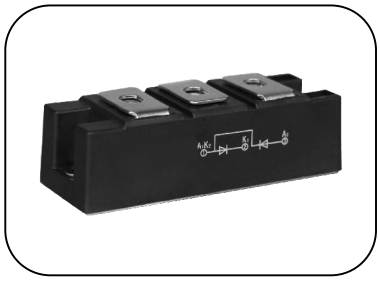
HIGH VOLTAGE DIODE MODULE

MDD Series



Features:

- Isolated mounting base 4000V~
- Pressure contact technology with Increased power cycling capability
- Space and weight saving

Typical Applications:

- Various rectifiers
- DC supply for PWM inverter

V_{RRM}	Type & Outline
2600V	MDD162M2P26-T39
2800V	MDD162M2P28-T39
3000V	MDD162M2P30-T39
3200V	MDD162M2P32-T39
3400V	MDD162M2P34-T39
3600V	MDD162M2P36-T39
4200V	MDD162M2P42-T39
4200V	MDO162M2P42-T39

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=100°C	150			160	A
$I_{F(RMS)}$	RMS forward current					251	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			20	mA
I_{FSM}	Surge forward current	V_R=60%V_{RRM}, t=10ms half sine MDD162M2P32	150			3.9	kA
I^2t	I^2t for fusing coordination					76	10^3A^2s
V_{FO}	Threshold voltage		150			0.84	V
r_F	Forward slope resistance					1.28	mΩ
V_{FM}	Peak forward voltage	I_{FM}=480A	25			1.58	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.23	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.08	°C/W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(MAX)		4000			V
F_m	Terminal connection torque(M6)			4.5		6.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
T_{vj}	Junction temperature			-40		150	°C
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				320		g
Outline	M2B						

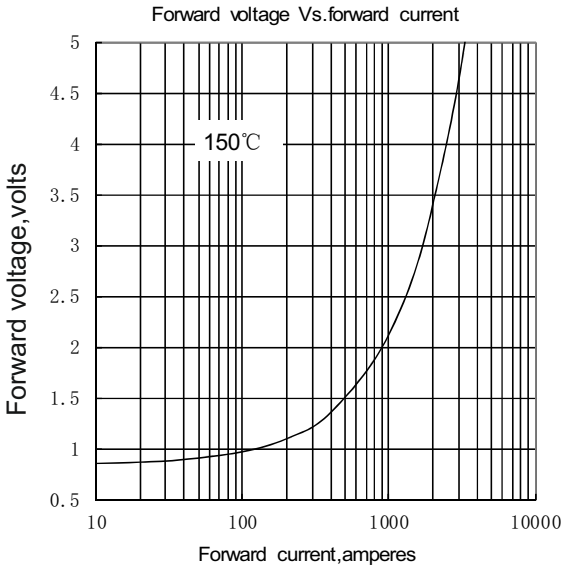


Fig.1

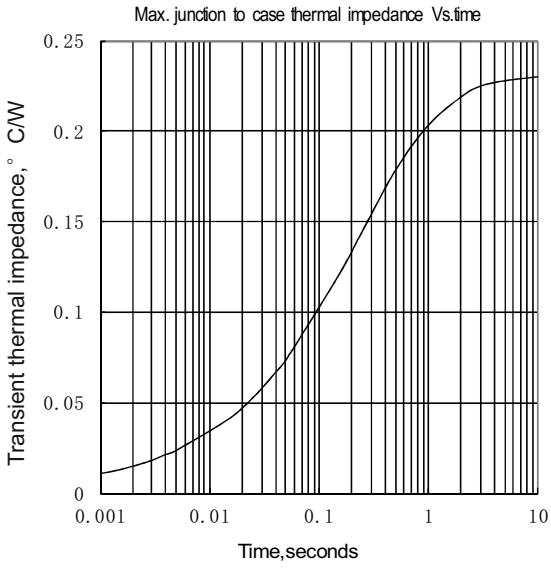


Fig.2

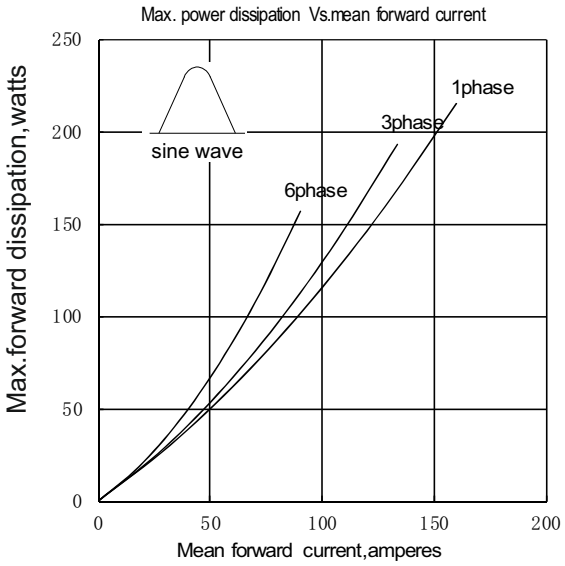


Fig.3

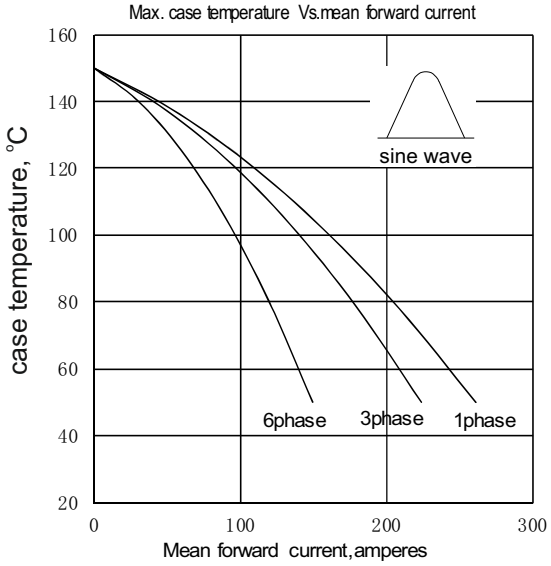


Fig.4

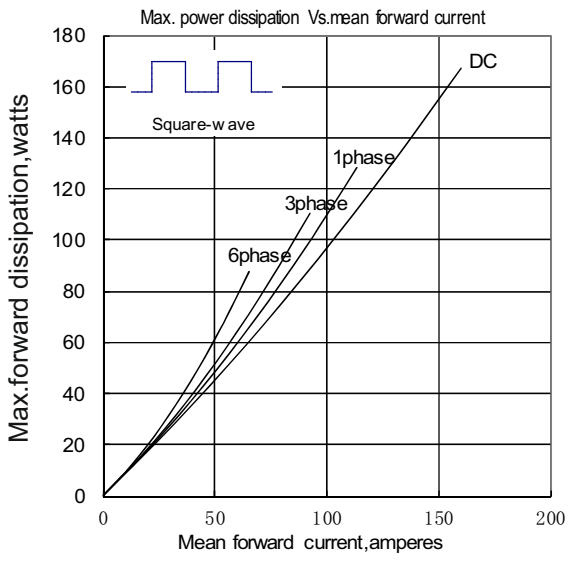


Fig.5

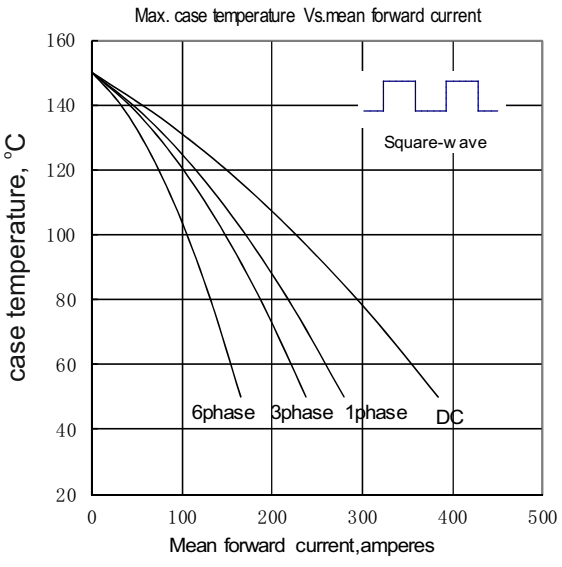


Fig.6

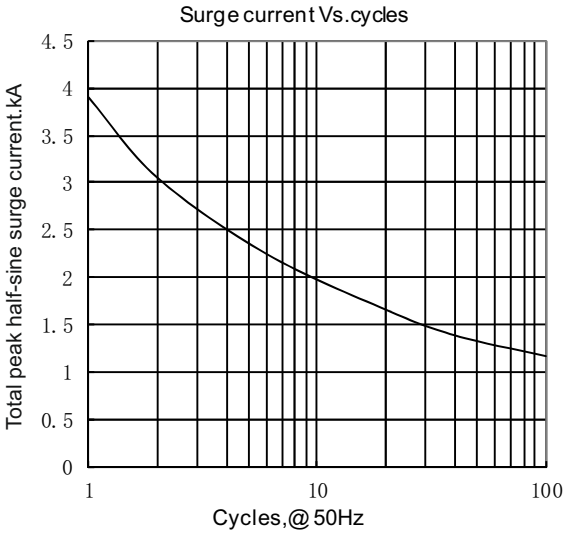


Fig.7

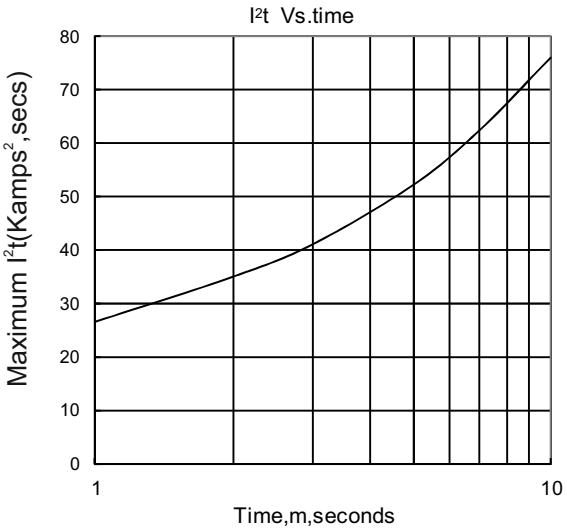
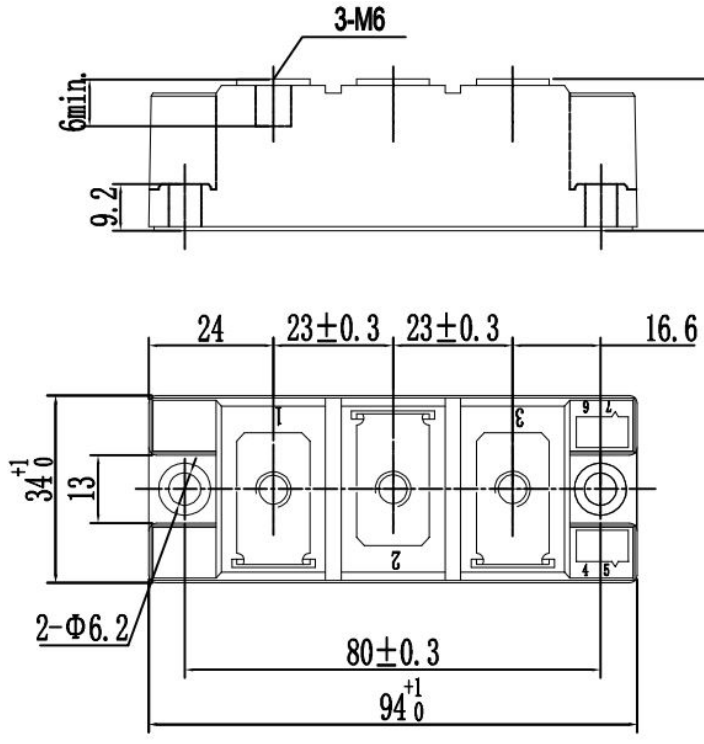
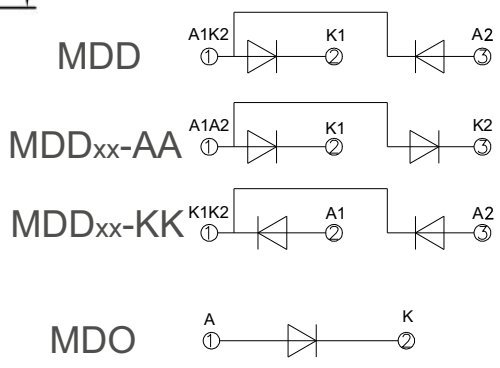


Fig.8

Outline:





Unmarked dimensional tolerance：±0.5mm