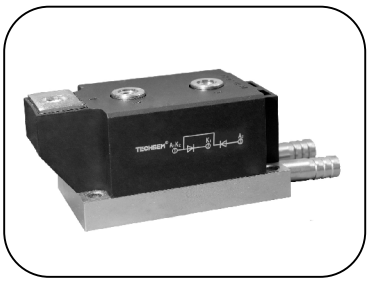


Features：

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

Typical Applications

- **n** Various rectifiers
- **n** DC supply for PWM inverter

V_{RRM}	Type & Outline
2600V	MDx400-26-406F3
2800V	MDx400-28-406F3
3000V	MDx400-30-406F3
3200V	MDx400-32-406F3
3400V	MDx400-34-406F3
3600V	MDx400-36-406F3
3600V	MD400-36-406F3G

MDx stands for any type of **MDC, MDA, MDK**

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=60°C	150			400	A
$I_{F(RMS)}$	RMS forward current					628	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			35	mA
I_{FSM}	Surge forward current	V_R=60%V_{RRM}, t=10ms half sine	150			8.1	kA
I^2t	I^2t for fusing coordination					328	10^3A^2s
V_{FO}	Threshold voltage		150			0.95	V
r_F	Forward slope resistance					1.05	mΩ
V_{FM}	Peak forward voltage	I_{FM}=1200A	25			2.41	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.11	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.04	°C/W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(MAX)		4000			V
F_m	Terminal connection torque(M12)			12		14	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				1580		g
Outline	406F3						

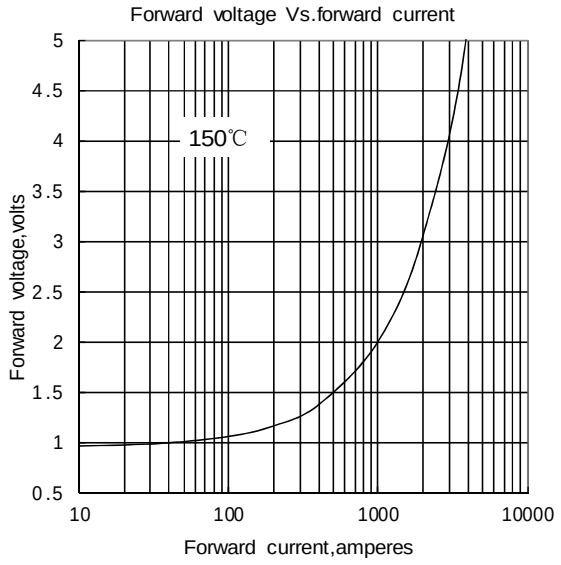


Fig.1

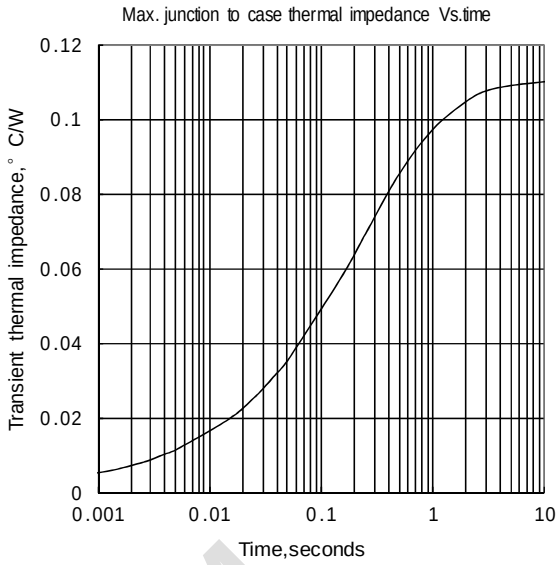


Fig.2

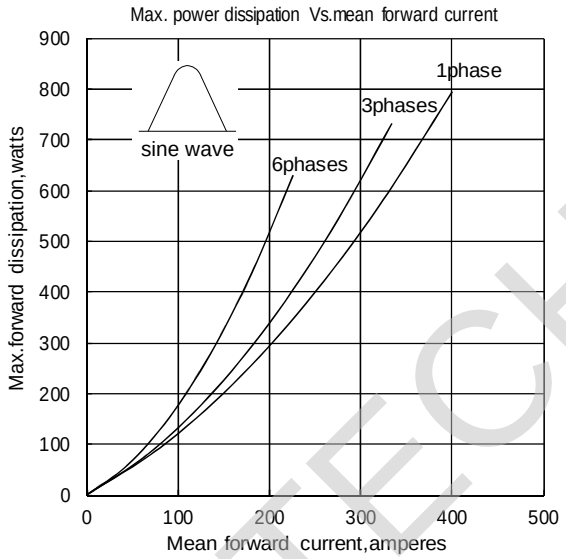


Fig.3

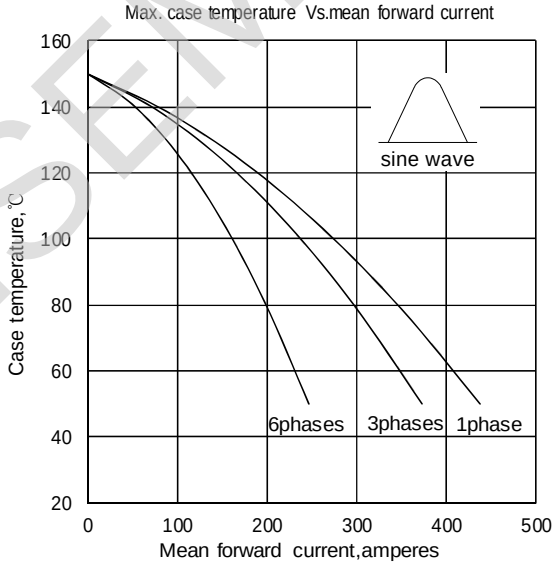


Fig.4

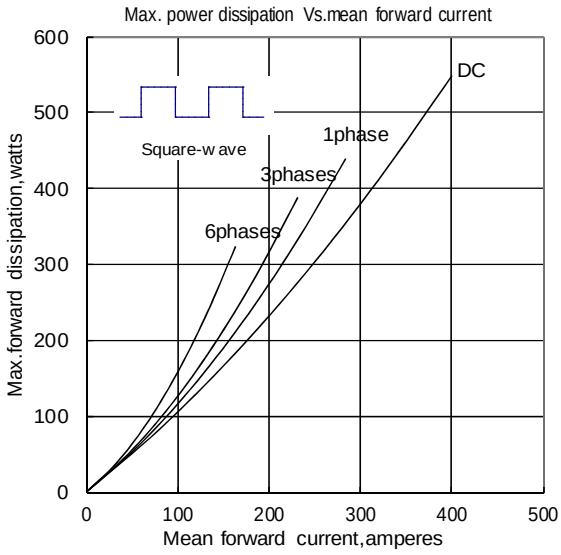


Fig.5

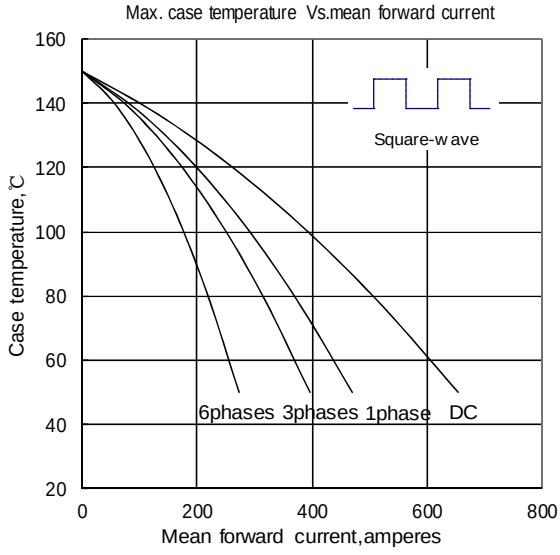


Fig.6

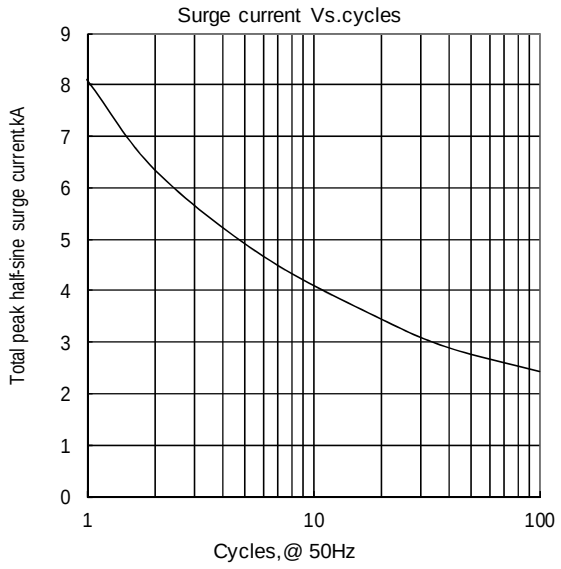


Fig.7

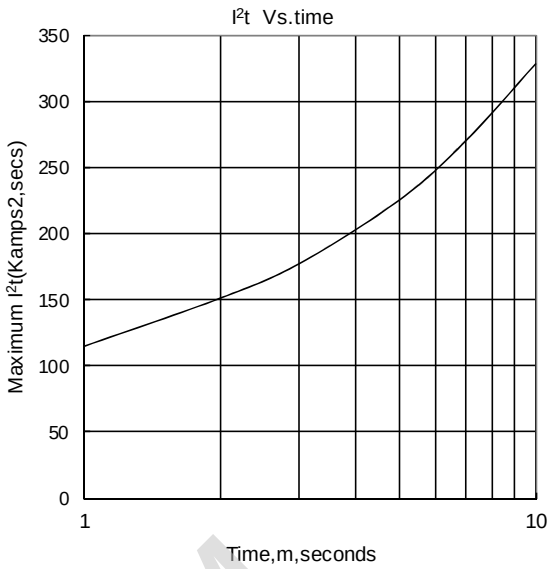
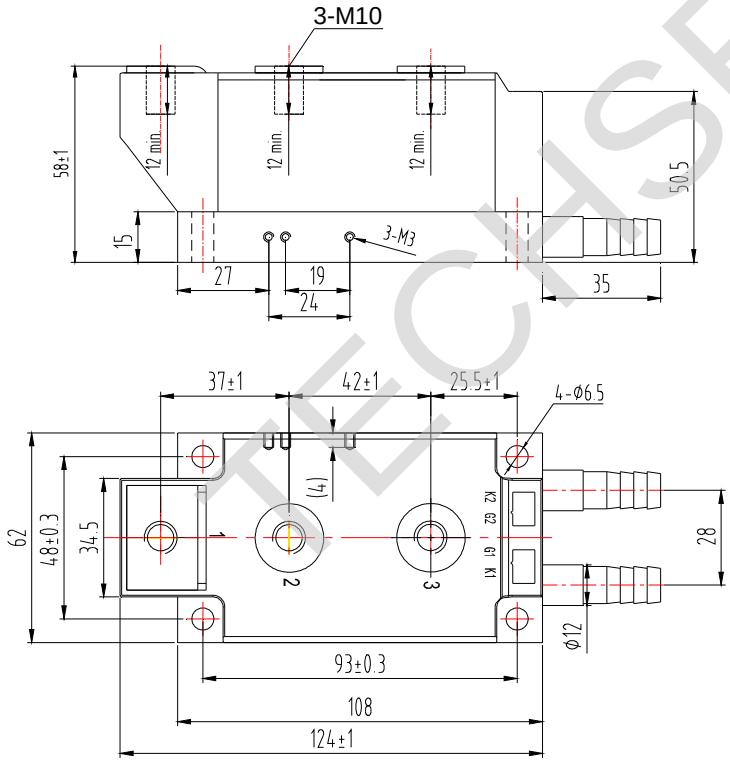
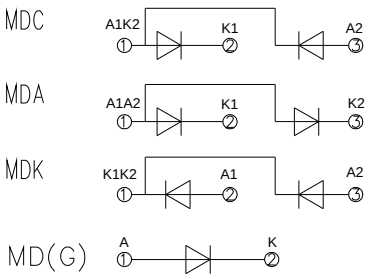


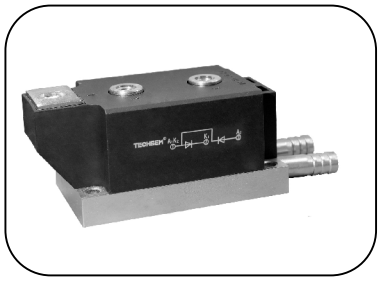
Fig.8

Outline:





Unmarked dimensional tolerance：±0.5mm



Features：

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

Typical Applications

- **n** Various rectifiers
- **n** DC supply for PWM inverter

V_{RRM}	Type & Outline
800V	MDx500-08-406F3
1000V	MDx500-10-406F3
1200V	MDx500-12-406F3
1400V	MDx500-14-406F3
1600V	MDx500-16-406F3
1800V	MDx500-18-406F3
1800V	MD500-18-406F3G

MDx stands for any type of **MDC, MDA, MDK**

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=60°C	150			500	A
$I_{F(RMS)}$	RMS forward current					785	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			40	mA
I_{FSM}	Surge forward current	V_R=60%V_{RRM},t=10ms half sine,	150			15	kA
I^2t	I^2t for fusing coordination					1125	10^3A^2s
V_{FO}	Threshold voltage		150			0.75	V
r_F	Forward slope resistance					0.51	mΩ
V_{FM}	Peak forward voltage	I_{FM}=1500A	25			1.66	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.13	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.04	°C/W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(MAX)		3000			V
F_m	Terminal connection torque(M12)			12		14	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				1580		g
Outline	406F3						

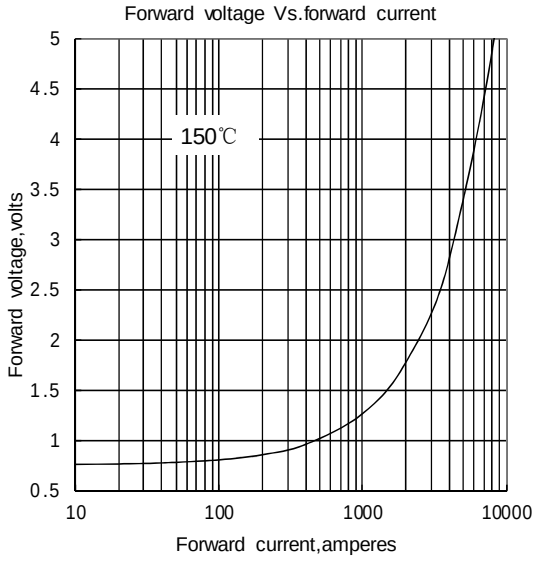


Fig.1

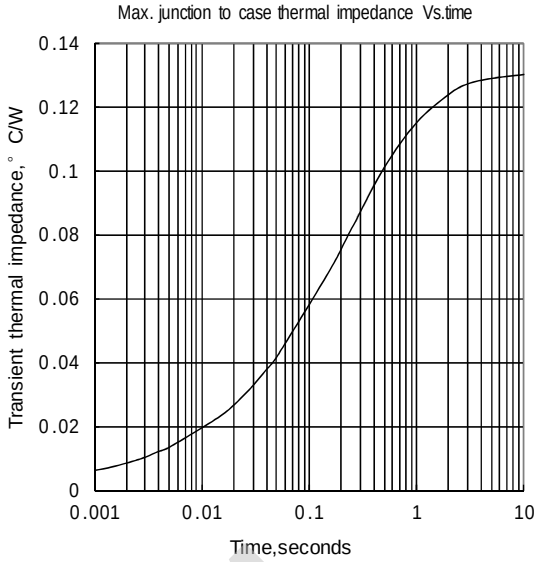


Fig.2

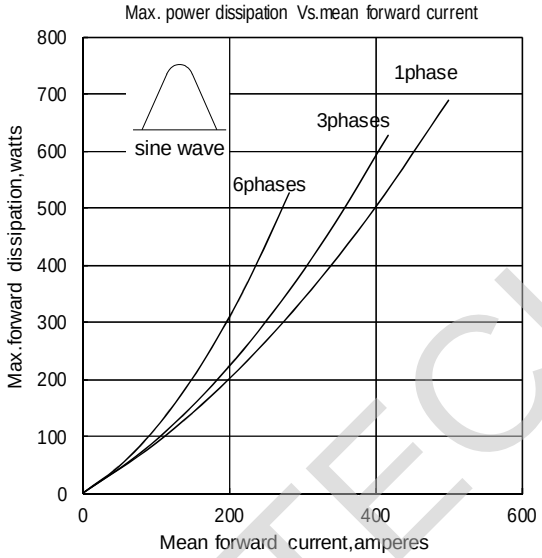


Fig.3

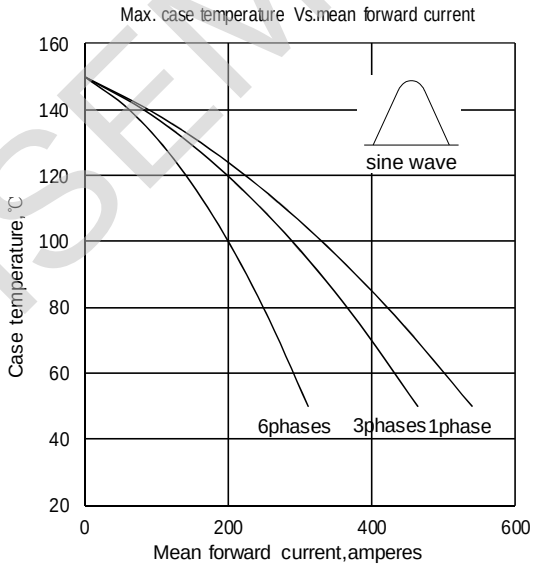


Fig.4

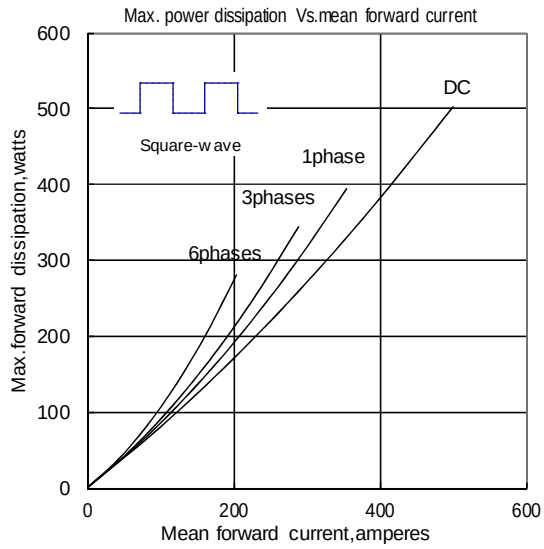


Fig.5

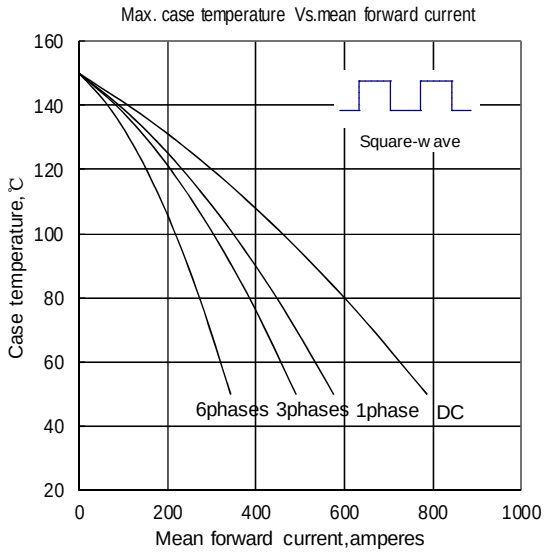


Fig.6

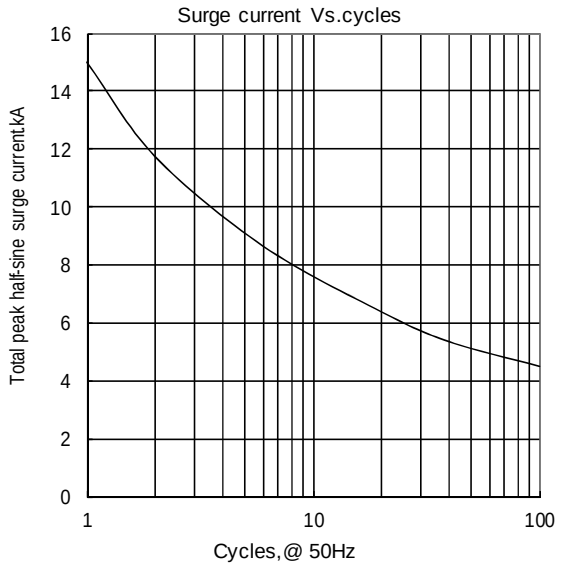


Fig.7

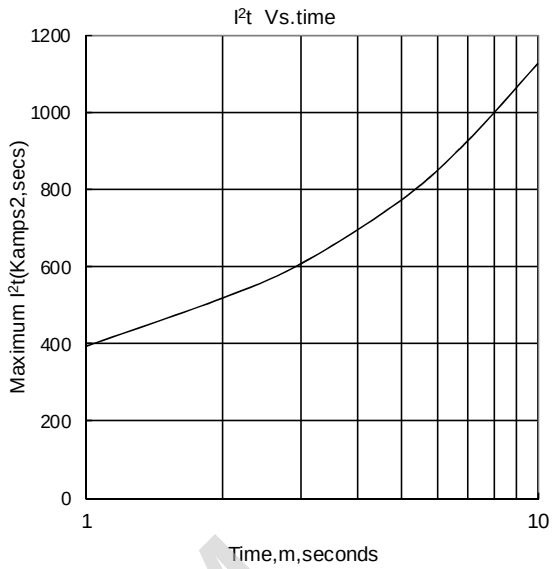
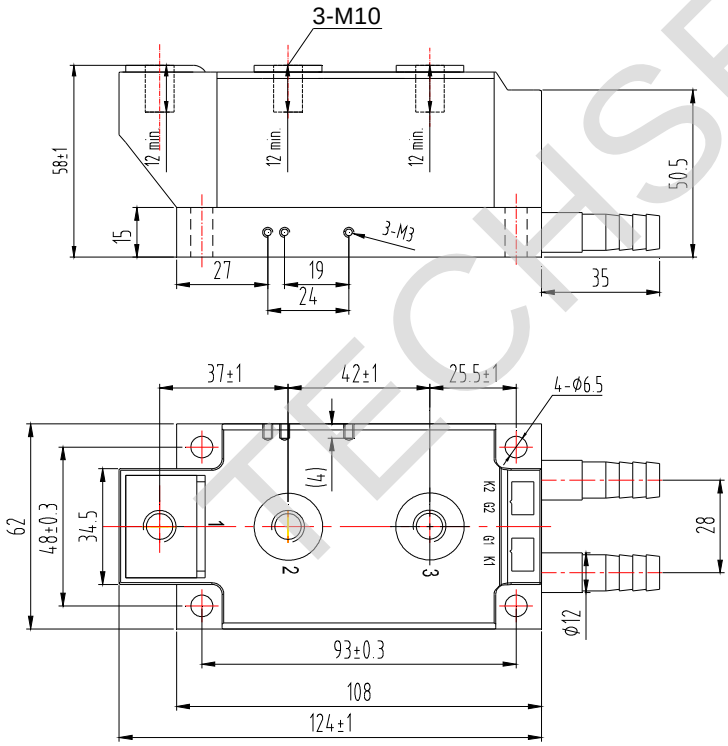
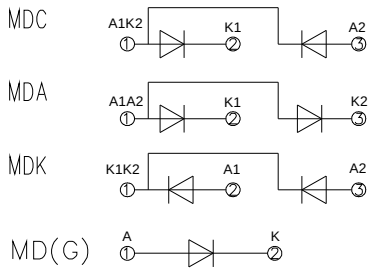


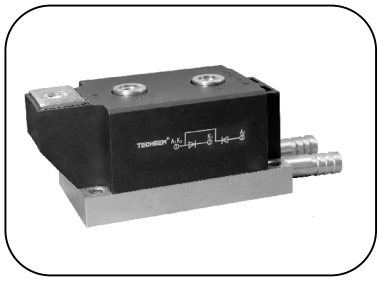
Fig.8

Outline:





Unmarked dimensional tolerance：±0.5mm



Features：

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

Typical Applications

- **n** Various rectifiers
- **n** DC supply for PWM inverter

V_{RRM}	Type & Outline
2000V	MDx500-20-406F3
2200V	MDx500-22-406F3
2500V	MDx500-25-406F3
2500V	MD500-25-406F3G

MDx stands for any type of **MDC, MDA, MDK**

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=60°C	150			500	A
$I_{F(RMS)}$	RMS forward current					785	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			40	mA
I_{FSM}	Surge forward current	V_R=60%V_{RRM}, t=10ms half sine	150			12	kA
I^2t	I^2t for fusing coordination					720	10^3A^2s
V_{FO}	Threshold voltage		150			0.85	V
r_F	Forward slope resistance					0.53	mΩ
V_{FM}	Peak forward voltage	I_{FM}=1500A	25			1.80	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.12	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.04	°C/W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(MAX)		3000			V
F_m	Terminal connection torque(M12)			12		14	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				1580		g
Outline	406F3						

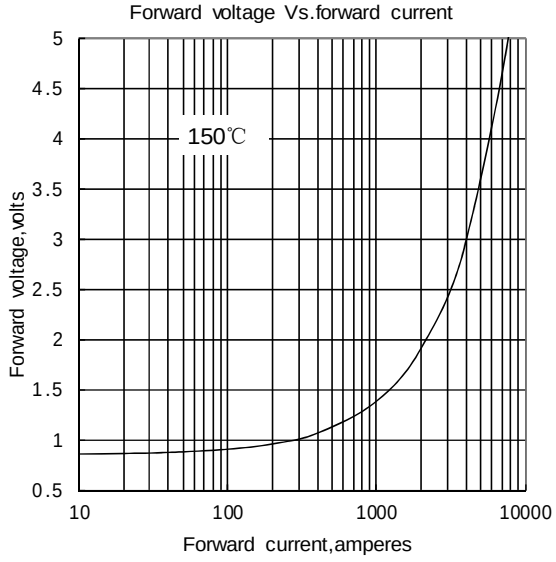


Fig.1

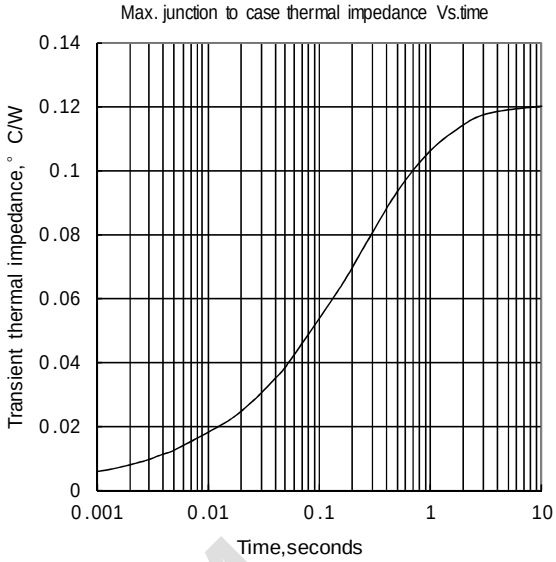


Fig.2

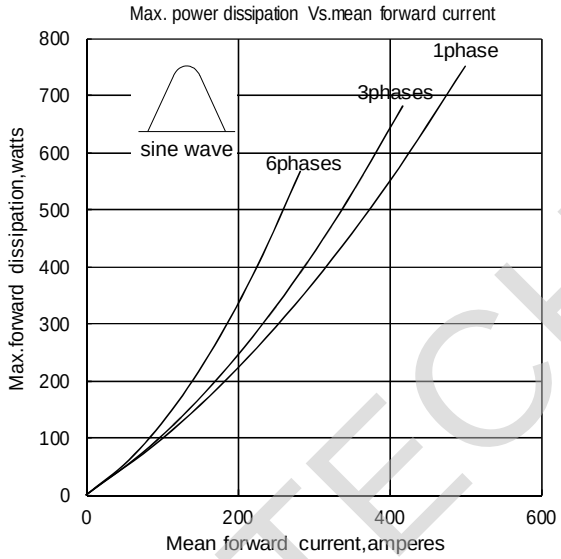


Fig.3

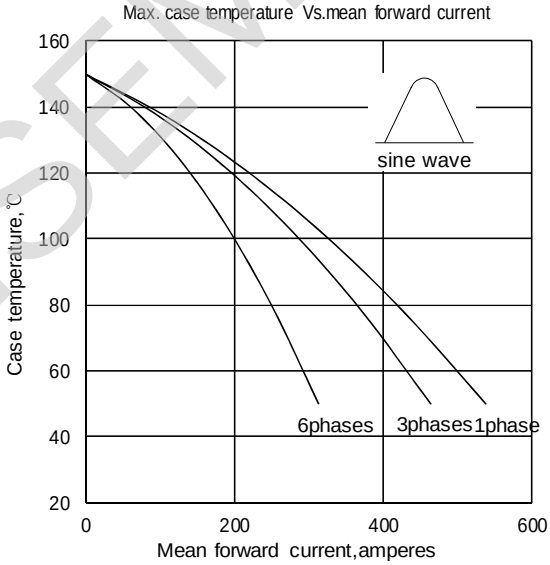


Fig.4

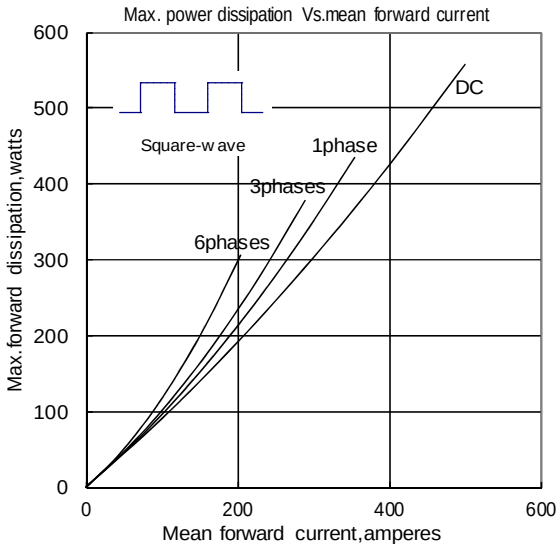


Fig.5

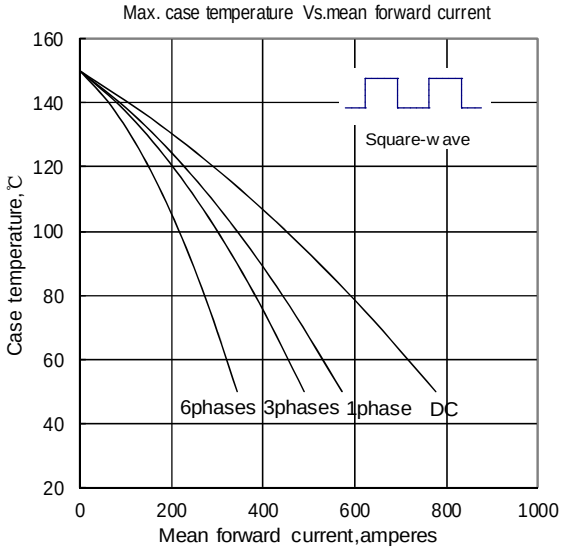


Fig.6

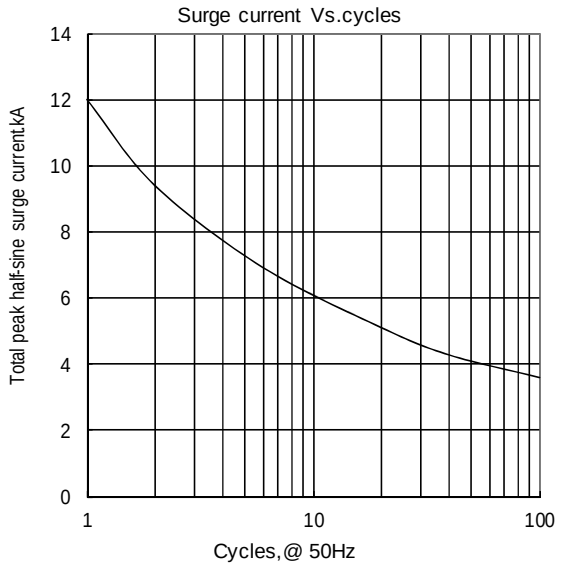


Fig.7

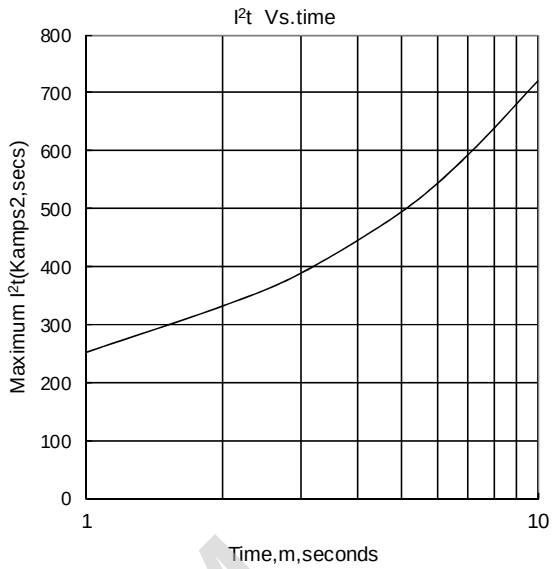
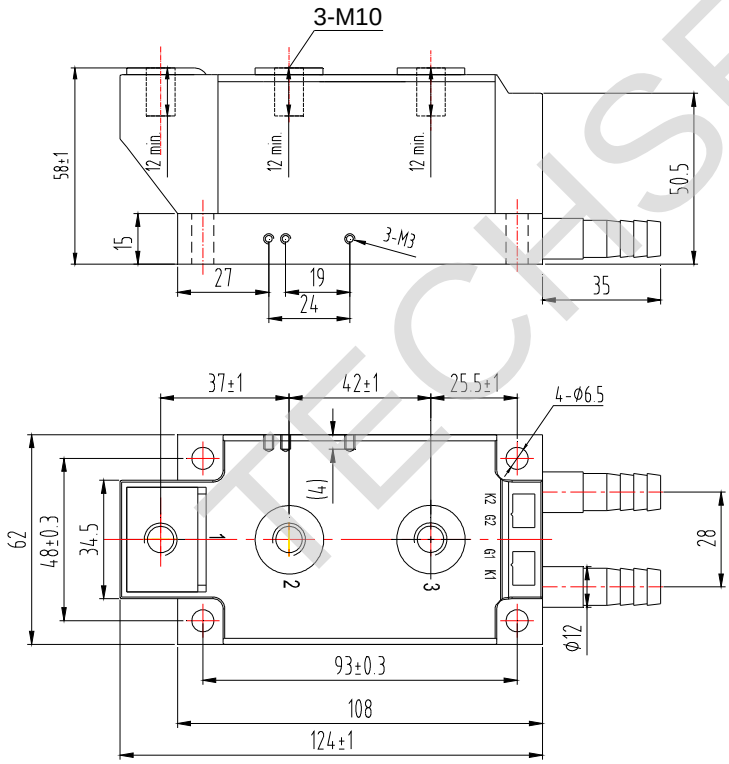
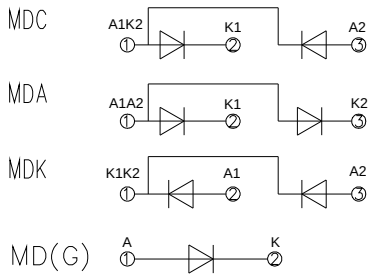


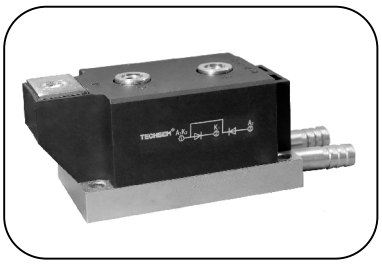
Fig.8

Outline:





Unmarked dimensional tolerance：±0.5mm



Features：

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

Typical Applications

- **n** Various rectifiers
- **n** DC supply for PWM inverter

V_{RRM}	Type & Outline
800V	MDx600-08-406F3
1000V	MDx600-10-406F3
1200V	MDx600-12-406F3
1400V	MDx600-14-406F3
1600V	MDx600-16-406F3
1800V	MDx600-18-406F3
1800V	MD600-18-406F3G

MDx stands for any type of **MDC, MDA, MDK**

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=60°C	150			600	A
$I_{F(RMS)}$	RMS forward current					942	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			40	mA
I_{FSM}	Surge forward current	V_R=60%V_{RRM}, t=10ms half sine	150			16.1	kA
I^2t	I^2t for fusing coordination					1296	10^3A^2s
V_{FO}	Threshold voltage		150			0.75	V
r_F	Forward slope resistance					0.42	mΩ
V_{FM}	Peak forward voltage	I_{FM}=1800A	25			1.65	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.11	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.04	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso}:1mA(MAX)		3000			V
F_m	Terminal connection torque(M12)			12		14	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				1580		g
Outline	406F3						

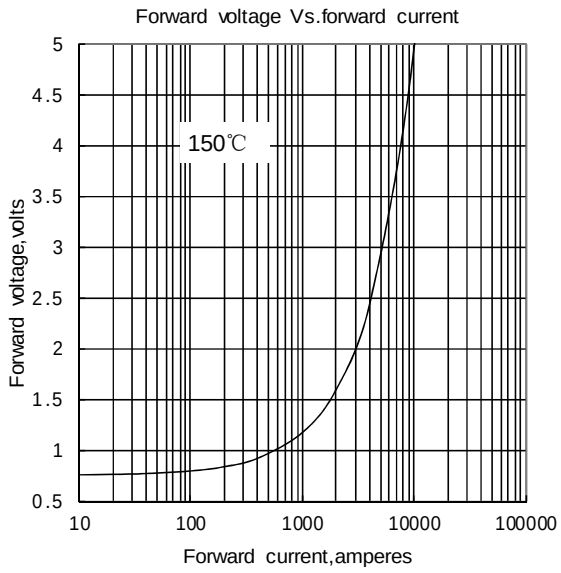


Fig.1

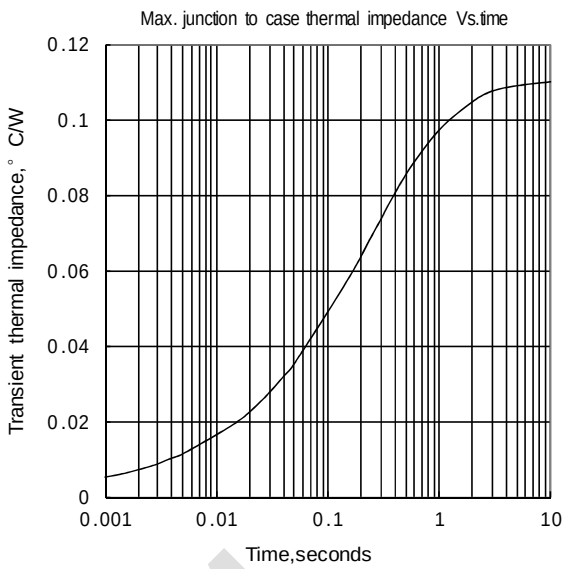


Fig.2

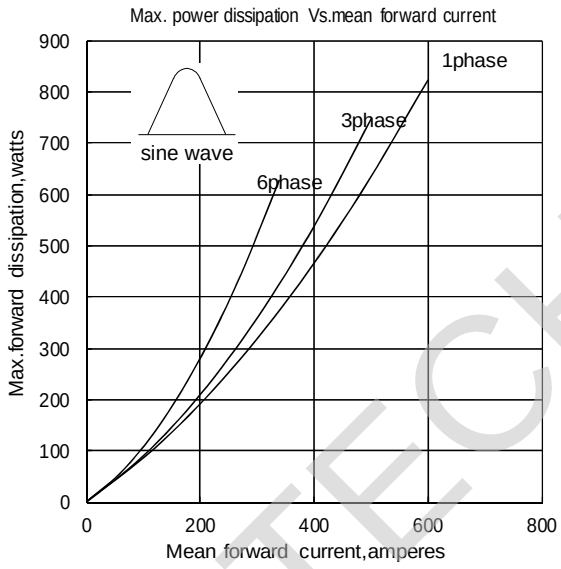


Fig.3

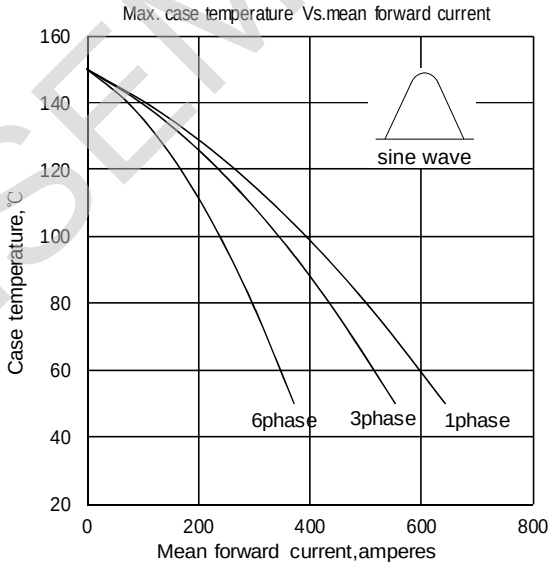


Fig.4

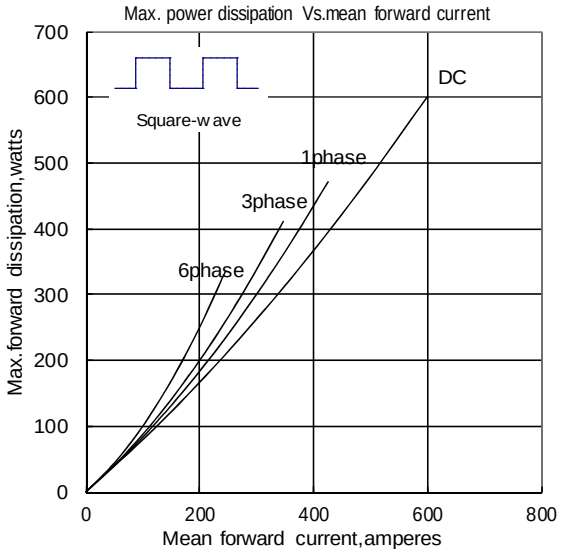


Fig.5

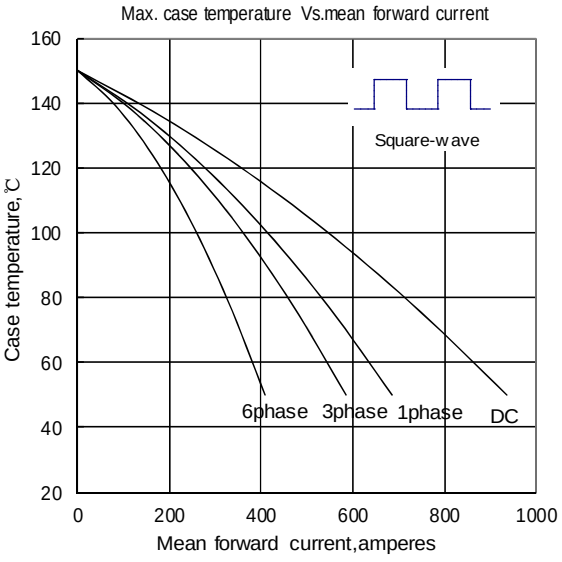


Fig.6

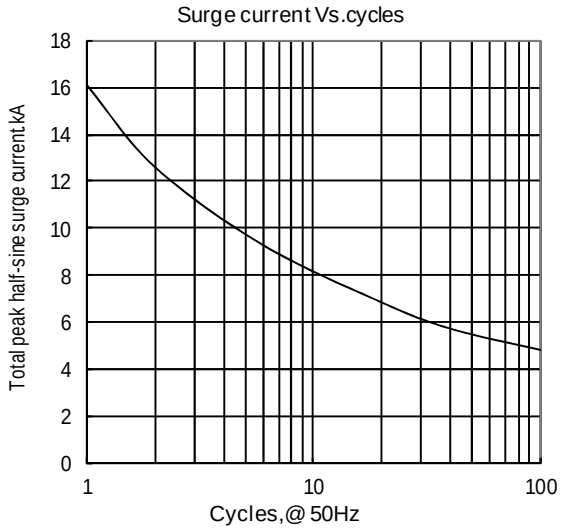


Fig.7

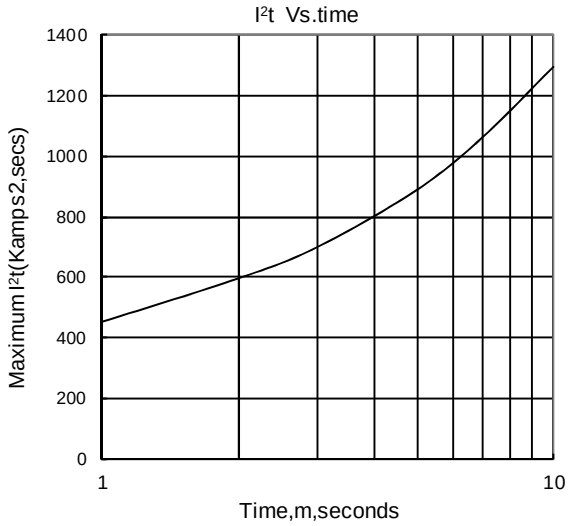
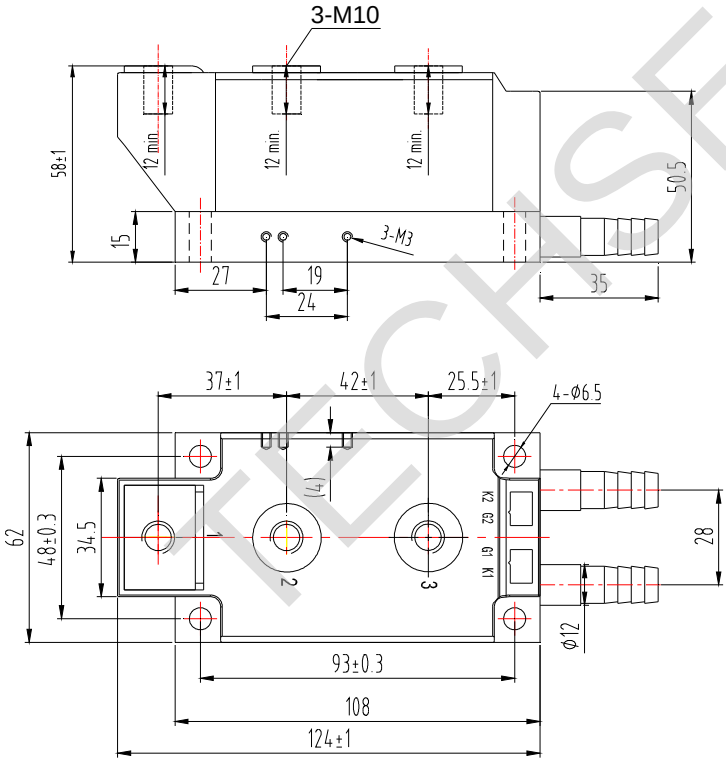
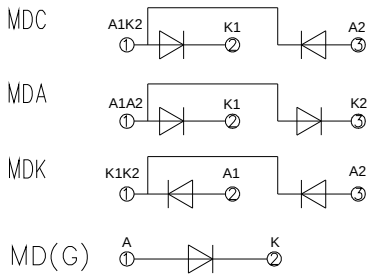


Fig.8

Outline:





Unmarked dimensional tolerance：±0.5mm