

Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

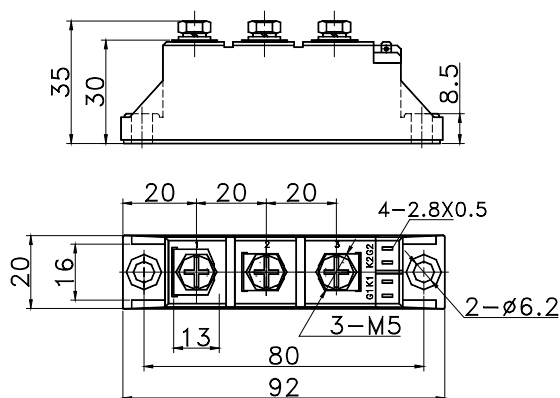
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 26A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 0.55KA
 I^2t $1.5A^2 S \cdot 10^3$

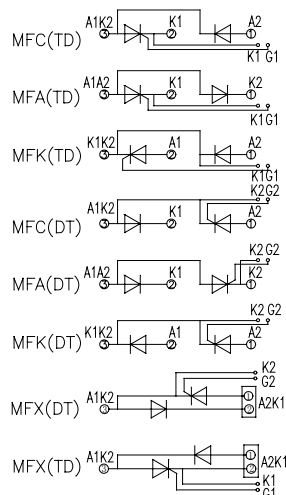


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			26	A
$I_{T(RMS)}$	RMS on-state current		125			41	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			8	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			0.55	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				1.50	$A^2 s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance					9.68	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 80A$	25			1.69	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			50	A/μs
I_{GT}	Gate trigger current		25	30		100	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	0.8		2.5	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125	0.2		0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.950	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.2	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				115		g

Outline:



215F3



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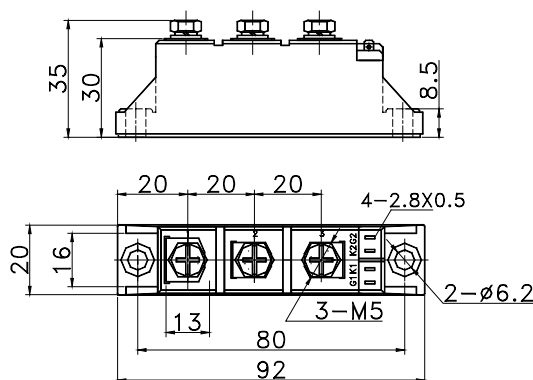
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 40A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 1.0KA
 I^2t $5.0A^2 S \cdot 10^3$

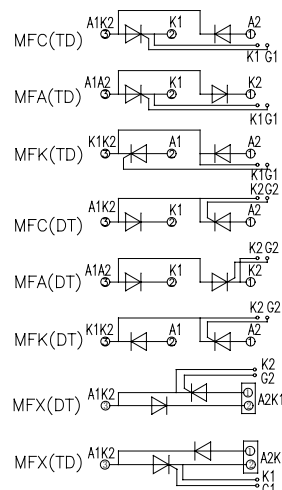


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			40	A
$I_{T(RMS)}$	RMS on-state current		125			63	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			8	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			1.00	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				5.0	$A^2 s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance					5.57	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 120A$	25			1.60	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			50	A/μs
I_{GT}	Gate trigger current		25	30		100	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		0.8		2.5	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.650	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.2	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				115		g

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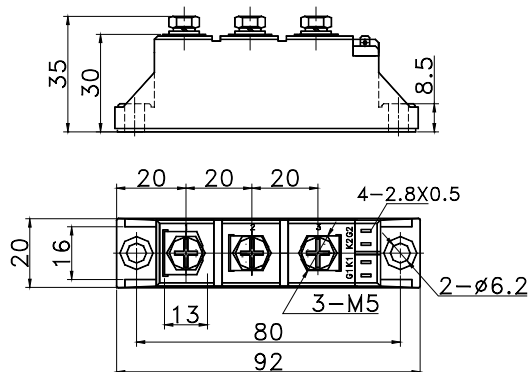
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 55A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 1.25KA
 I^2t $7.8A^2 S \cdot 10^3$

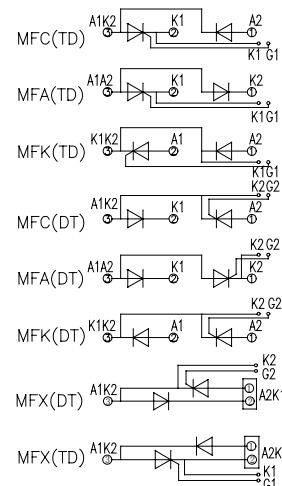


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			55	A
$I_{T(RMS)}$	RMS on-state current		125			86	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			8	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			1.25	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				7.80	$A^2 s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance					3.47	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 170A$	25			1.50	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			50	A/μs
I_{GT}	Gate trigger current			30		100	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	0.8		2.5	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.530	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.2	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}: 1mA(MAX)$		2500			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				100		g

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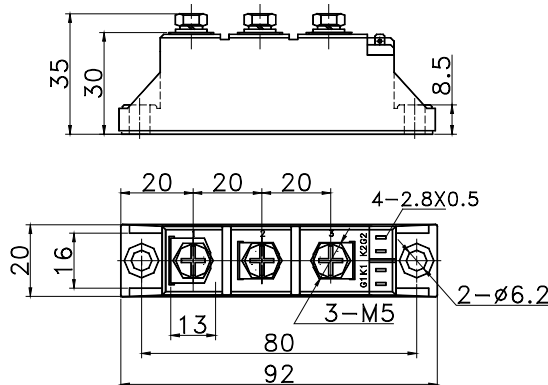
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$I_{T(AV)}$ 55A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 1.25KA
 I^2t $7.8A^2S \times 10^3$

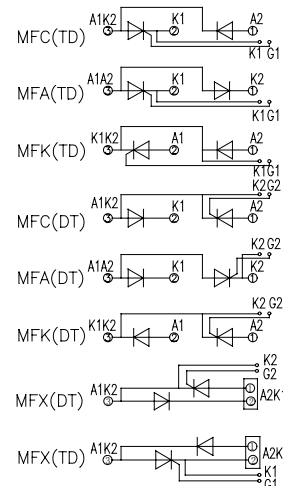


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			55	A
$I_{T(RMS)}$	RMS on-state current		125			86	A
V_{DRM}	Repetitive peak off-state voltage	$V_{DRM} \& V_{RRM}$ tp=10ms	125	600		1800	V
V_{RRM}	Repetitive peak reverse voltage	$V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively					
I_{DRM}	Repetitive peak current	at V_{DRM}	125			8	mA
I_{RRM}		at V_{RRM}					
I_{TSM}	Surge on-state current	10ms half sine wave	125			1.25	KA
I^2t	I ² T for fusing coordination	$V_R = 60\% V_{RRM}$				7.8	$A^2s \times 10^3$
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance					3.47	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 170A$	25			1.50	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			50	A/μs
I_{GT}	Gate trigger current		25	30		100	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		0.8		2.5	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.530	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.2	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				100		g

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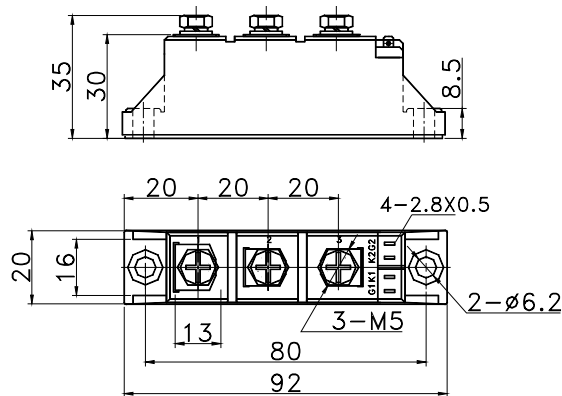
- AC/DC Motor drives
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- DC supply for PWM inverter

$I_{T(AV)}$ 55A
 V_{DRM}/V_{RRM} 1900~3000V
 I_{TSM} 1.15KA
 I^2t $6.6A^2 S \cdot 10^3$

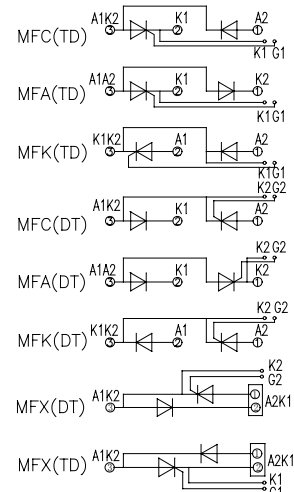


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$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			55	A
$I_{T(RMS)}$	RMS on-state current		125			86	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			10	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			1.15	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				6.60	$A^2 s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					5.85	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 120A$	25			1.96	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			50	A/μs
I_{GT}	Gate trigger current		25	30		150	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	0.8		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.640	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.2	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				115		g

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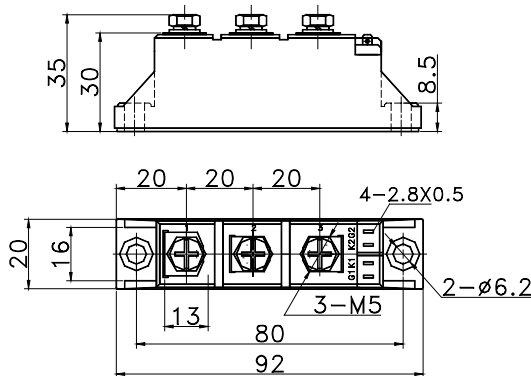
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$I_{T(AV)}$ 70A
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 I_{TSM} 1.60KA
 I^2t $13A^2 S \cdot 10^3$

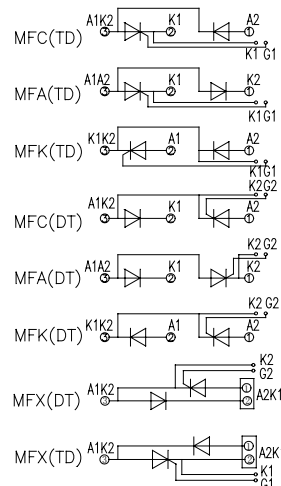


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				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			70	A
$I_{T(RMS)}$	RMS on-state current		125			110	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			10	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			1.60	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				13.0	$A^2s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					2.64	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 210A$	25			1.48	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			50	A/μs
I_{GT}	Gate trigger current		25	30		100	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		0.8		2.5	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.410	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.2	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}: 1mA(MAX)$		2500			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_i	Weight				115		g

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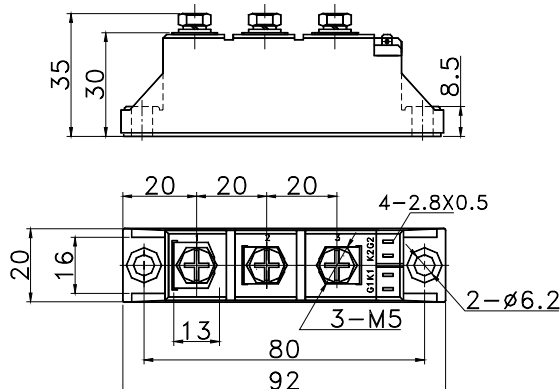
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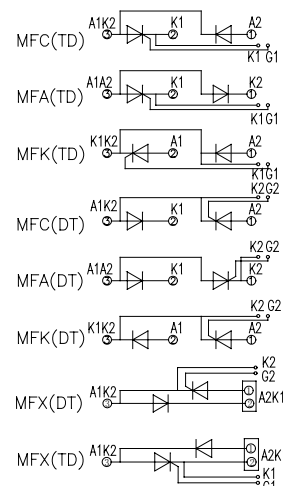


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				Min	Type	Max	
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$I_{T(RMS)}$	RMS on-state current		125			110	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			12	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			1.60	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				13.0	$A^2 s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					4.64	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 210A$	25			1.93	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			50	A/μs
I_{GT}	Gate trigger current			30		150	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	0.8		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.450	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.2	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				115		g

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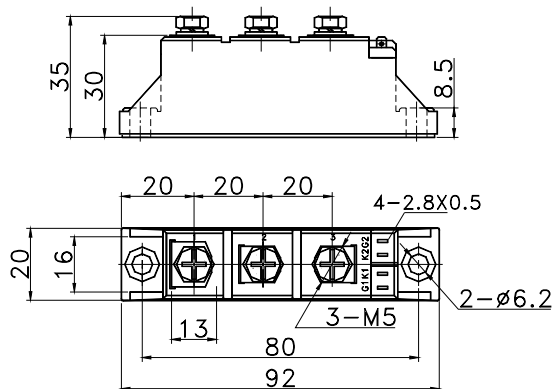
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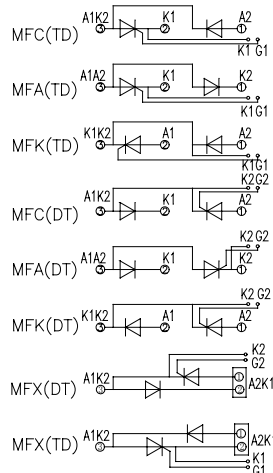


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I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			12	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			1.60	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				13.0	$A^2 s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					4.64	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 210A$	25			1.93	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			50	A/μs
I_{GT}	Gate trigger current		25	30		150	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		0.8		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.450	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.2	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}: 1mA(MAX)$		3600			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				115		g

Outline:



215F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

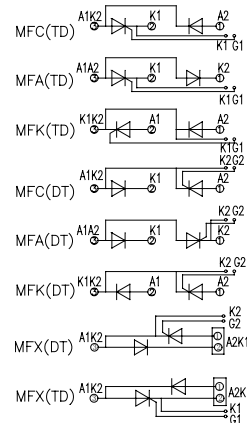
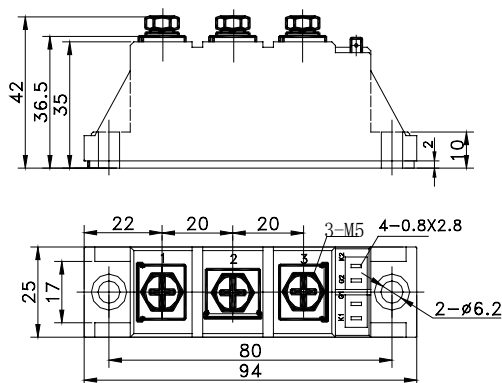
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$$\begin{array}{ll} I_{T(AV)} & 90A \\ V_{DRM}/V_{RRM} & 600\sim 1800V \\ I_{TSM} & 2.0A \times 10^3 \\ I^2t & 20.4A^2 S \times 10^3 \end{array}$$



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
I _{T(AV)}	Mean on-state current	180° half sine wave 50Hz Single side cooled,Tc=85°C	125			90	A
I _{T(RMS)}	RMS on-state current		125			141	A
V _{DRM} V _{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V _{DRM} &V _{RRM} tp=10ms V _{DSM} &V _{RSM} = V _{DRM} &V _{RRM} +200V respectively	125	600		1600	V
I _{DRM} I _{RRM}	Repetitive peak current	at V _{DRM} at V _{RRM}	125			10	mA
I _{TSM}	Surge on-state current	10ms half sine wave	125			2	KA
I ² t	I ² T for fusing coordination	V _R =60%V _{RRM}				20.4	A ² s*10 ³
V _{TO}	Threshold voltage		125			0.8	V
r _T	On-state slop resistance					3.01	mΩ
V _{TM}	Peak on-state voltage	I _{TM} =270A	25			1.7	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =67%V _{DRM}	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I _{GT}	Gate trigger current	V _A =12V, I _A =1A	25	30		100	mA
V _{GT}	Gate trigger voltage			1		2.5	V
I _H	Holding current			20		100	mA
V _{GD}	Non-trigger gate voltage	V _{DM} =67%V _{DRM}	125	0.2			V
R _{th(j-c)}	Thermal resistance Junction to case	Single side cooled				0.28	°C /W
Rth(c-h)	Thermal resistance case to heatsink	Single side cooled				0.15	°C /W
V _{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I _{iso} :1mA(MAX)		2500			V
F _m	Thermal connection torque(M5)				4		N·m
	Mounting torque(M6)				6		N·m
T _{stg}	Stored temperature			-40		125	°C
W _t	Weight				160		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

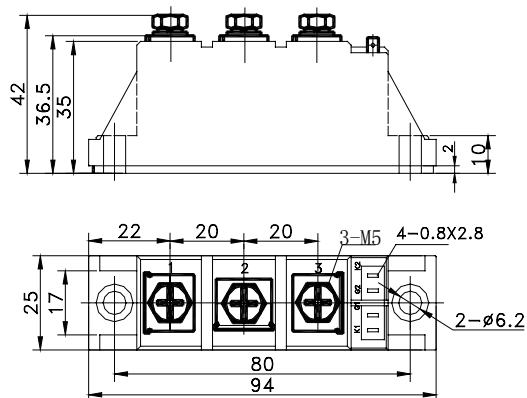
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 90A
 V_{DRM}/V_{RRM} 1900~3000V
 I_{TSM} 2.0KA
 I^2t $20A^2 S \cdot 10^3$

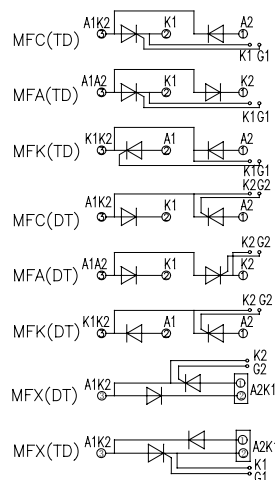


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			90	A
$I_{T(RMS)}$	RMS on-state current		125			141	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			15	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			2.0	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				20	$A^2 s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					3.26	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 270A$	25			1.92	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		150	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.280	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.15	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				115		g

Outline:



217F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

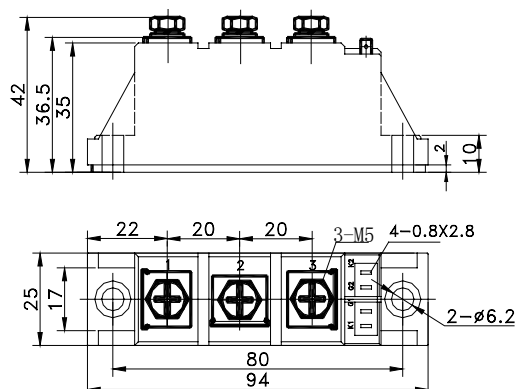
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 90A
 V_{DRM}/V_{RRM} 1900~3000V
 I_{TSM} 2.0KA
 I^2t $20A^2 S \cdot 10^3$

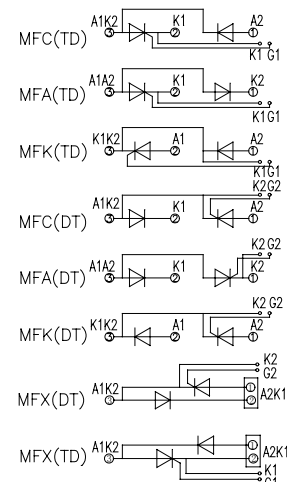


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			90	A
$I_{T(RMS)}$	RMS on-state current		125			141	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			15	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			2.0	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				20	$A^2 s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					3.26	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 270A$	25			1.92	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		150	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1.0		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.280	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.15	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				160		g

Outline:



217F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

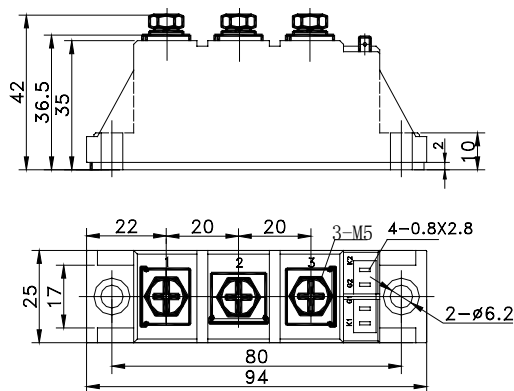
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 110A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 2.44KA
 I^2t 29A² S*10³

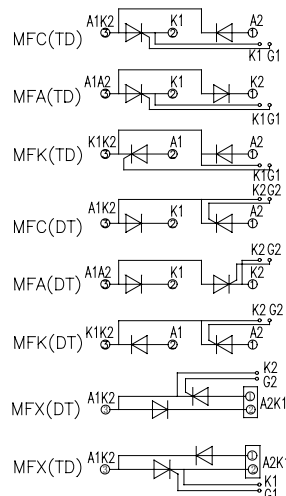


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			110	A
$I_{T(RMS)}$	RMS on-state current		125			173	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & V_{RRM} +200V respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			12	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			2.40	KA
I^2t	I ² T for fusing coordination	$V_R=60\%V_{RRM}$	125			29	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance		125			2.29	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=330A$	25			1.69	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		100	mA
V_{GT}	Gate trigger voltage	$V_A=12V, I_A=1A$	25	1.0		2.5	V
I_H	Holding current		125	20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM}=67\%V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.250	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.15	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				160		g

Outline:



217F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

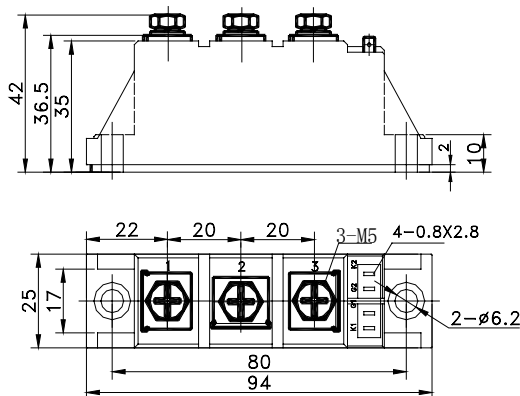
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	110A
V_{DRM}/V_{RRM}	1900~3000V
I_{TSM}	2.4KA
I^2t	$29A^2 S \cdot 10^3$

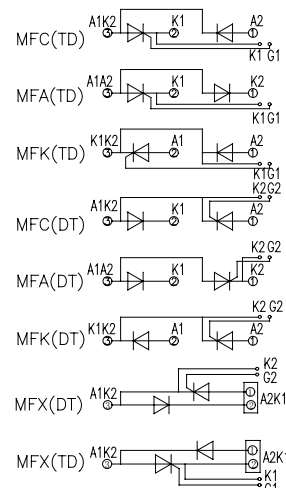


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, $T_c=85^{\circ}C$	125			110	A
$I_{T(RMS)}$	RMS on-state current		125			173	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} $t_p=10ms$ V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			20	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			2.4	KA
I^2t	I^2T for fusing coordination	$V_R=60\%V_{RRM}$				29	$A^2s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					2.61	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=330A$	25			1.90	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current			30		150	mA
V_{GT}	Gate trigger voltage	$V_A=12V, I_A=1A$	25	1.0		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM}=67\%V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.250	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.15	$^{\circ}C/W$
V_{iso}	Isolation voltage	50Hz, R.M.S, $t=1min, I_{iso}:1mA(MAX)$		3600			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	$^{\circ}C$
W_t	Weight				160		g

Outline:



217F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

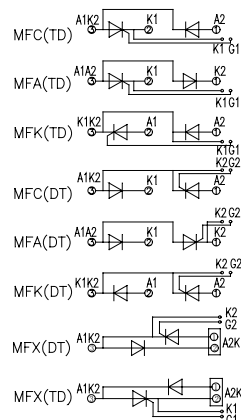
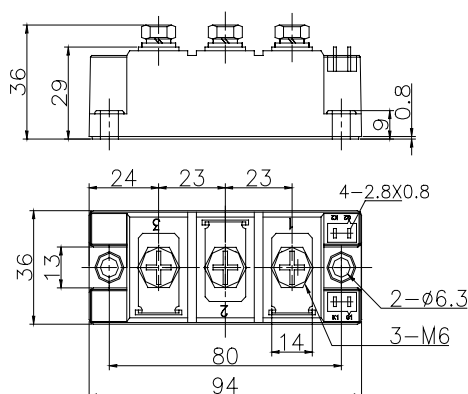
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$$\begin{array}{ll} I_{T(AV)} & 135A \\ V_{DRM}/V_{RRM} & 600\sim 1800V \\ I_{TSM} & 2.0A \times 10^3 \\ I^2t & 20.4A^2 S \times 10^3 \end{array}$$



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			135	A
$I_{T(RMS)}$	RMS on-state current		125			212	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			15	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			3.8	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				72	$A^2s \times 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance					2.85	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 410A$	25			1.75	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current			30		100	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1		2.5	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125	0.2			V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.2	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.08	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}: 1mA(MAX)$		2500			V
F_m	Thermal connection torque(M5)				4		N·m
	Mounting torque(M6)				6		N·m
T_{stg}	Stored temperature			-40		125	°C
W_i	Weight				320		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

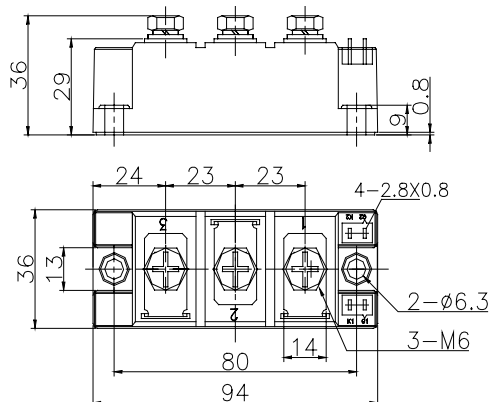
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 135A
 V_{DRM}/V_{RRM} 1900~3000V
 I_{TSM} 3.8KA
 I^2t 72A² S*10³

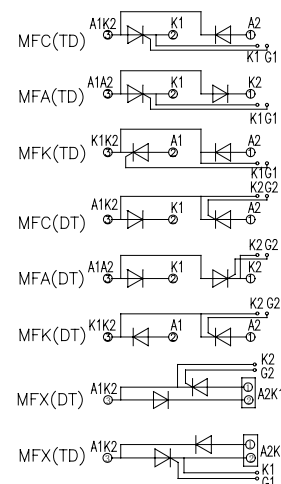


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			135	A
$I_{T(RMS)}$	RMS on-state current		125			212	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			22	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			3.8	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				72	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					2.26	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 405A$	25			1.96	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current			30		150	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1.0		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.200	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.08	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				320		g

Outline:



214F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

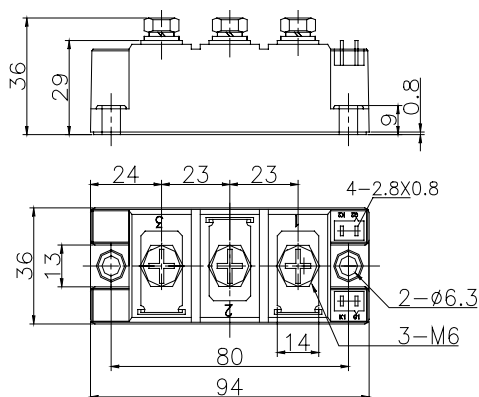
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$$\begin{array}{ll} I_{T(AV)} & 160A \\ V_{DRM}/V_{RRM} & 600\sim 1800V \\ I_{TSM} & 5.4KA \\ I^2t & 146A^2 S \cdot 10^3 \end{array}$$

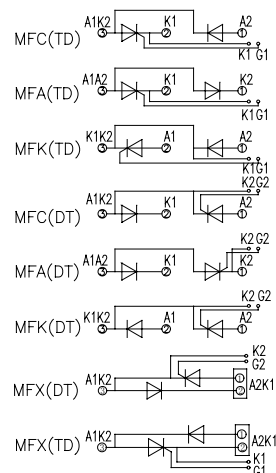


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			160	A
$I_{T(RMS)}$	RMS on-state current		125			251	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			20	mA
I_{TSM} I^2t	Surge on-state current I^2t for fusing coordination	10ms half sine wave $V_R = 60\% V_{RRM}$	125			5.40 146	KA $A^2s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance		125			1.69	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 480A$	25			1.70	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		150	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1.0		2.5	V
I_H	Holding current		25	20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.170	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.08	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}: 1mA(MAX)$		2500			V
F_m	Thermal connection torque(M5) Mounting torque(M6)				3.0 3.0		N·m N·m
T_{stg}	Stored temperature			-40		125	°C
W_i	Weight				320		g

Outline:



214F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

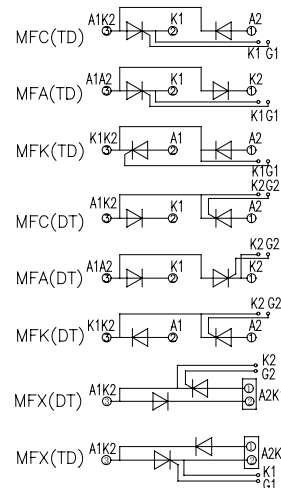
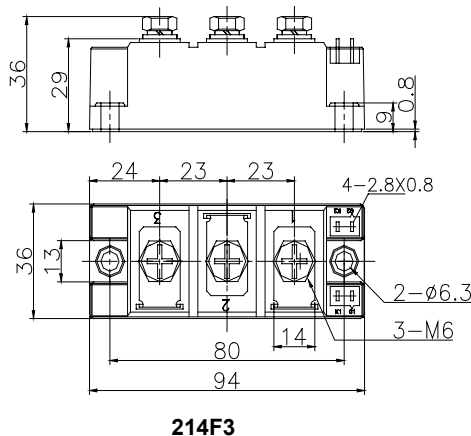
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 160A
 V_{DRM}/V_{RRM} 1900~3000V
 I_{TSM} 5.4KA
 I^2t 146A² S*10³



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			160	A
$I_{T(RMS)}$	RMS on-state current		125			251	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			25	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			5.40	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				146	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					1.79	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 480A$	25			1.90	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		150	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.170	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.2	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5)				3.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				320		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

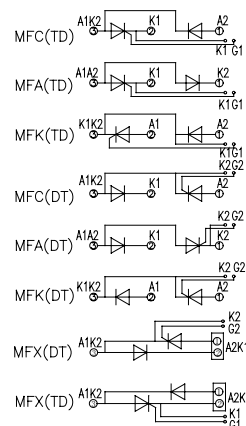
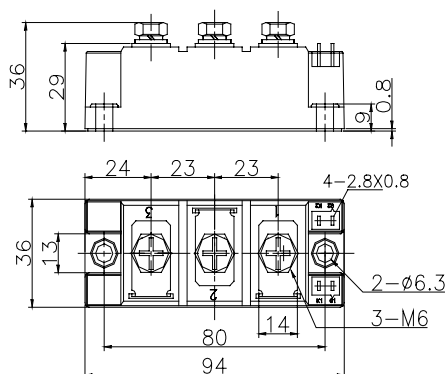
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$$\begin{array}{ll} I_{T(AV)} & 182A \\ V_{DRM}/V_{RRM} & 600\sim 1800V \\ I_{TSM} & 5.8A \times 10^3 \\ I^2t & 168A^2 S \times 10^3 \end{array}$$



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			182	A
$I_{T(RMS)}$	RMS on-state current		125			286	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			25	mA
I_{TSM} I^2t	Surge on-state current I^2t for fusing coordination	10ms half sine wave $V_R = 60\% V_{RRM}$	125			5.8 168	KA $A^2s \times 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance		125			1.26	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 550A$	25			1.62	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current			30		150	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1		2.5	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125	0.2			V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.16	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.08	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5) Mounting torque(M6)				4 6		N·m N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				320		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

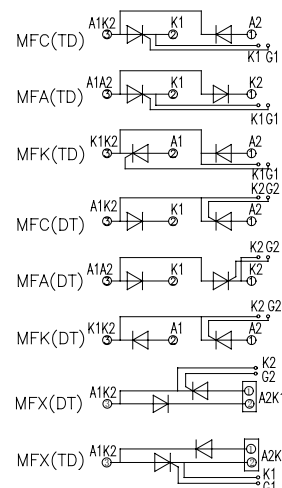
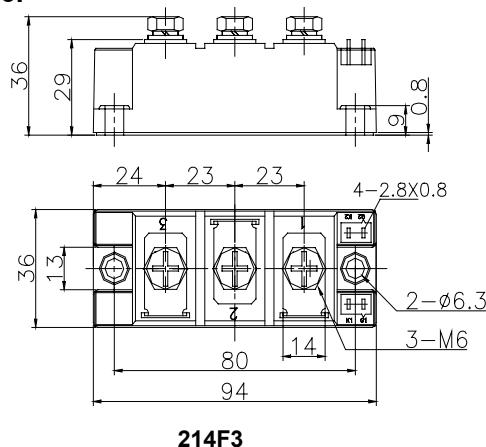
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 182A
 V_{DRM}/V_{RRM} 1900~3000V
 I_{TSM} 5.8KA
 I^2t 168A² S*10³



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			182	A
$I_{T(RMS)}$	RMS on-state current		125			286	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			30	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			5.80	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				168	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					1.40	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 550A$	25			1.80	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current			30		150	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1.0		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.160	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.08	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5)				3.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				320		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

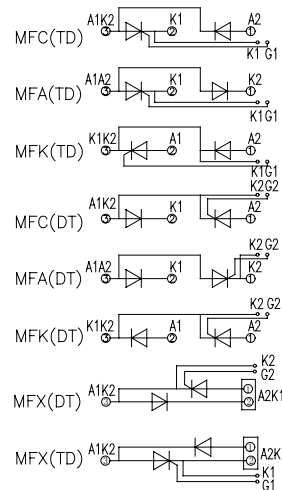
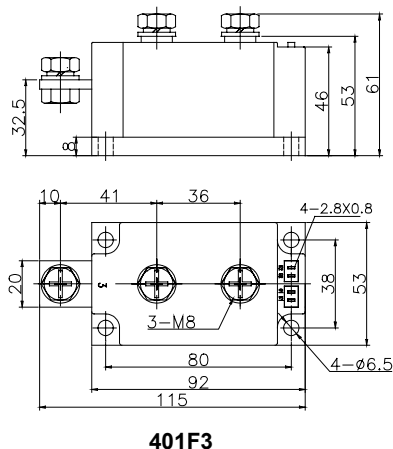
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 200A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 7.2KA
 I^2t 259A² S*10³



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			200	A
$I_{T(RMS)}$	RMS on-state current		125			314	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			30	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			7.2	KA
I^2t	I ² T for fusing coordination	$V_R = 60\% V_{RRM}$				259	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					1.27	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 600A$	25			1.65	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current			30		180	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1.0		2.5	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.140	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.04	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				4.5		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				930		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

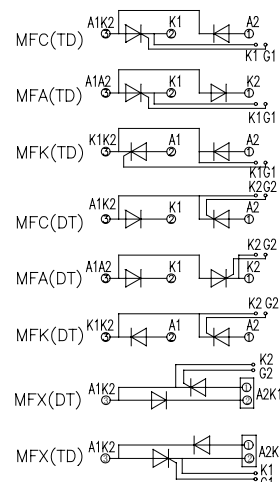
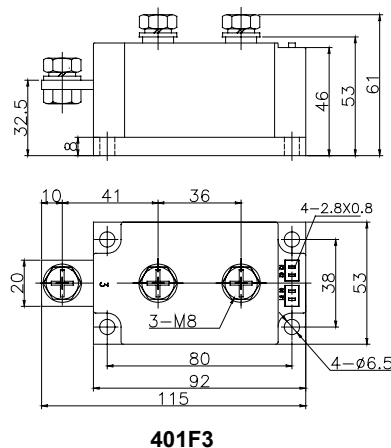
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ **200A**
 V_{DRM}/V_{RRM} **1900~3000V**
 I_{TSM} **7.2KA**
 I^2t **259A² S*10³**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			200	A
$I_{T(RMS)}$	RMS on-state current		125			314	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			35	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			7.20	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				259	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					1.43	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 600A$	25			1.90	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		180	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1.0		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.140	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.04	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5)				4.5		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				930		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

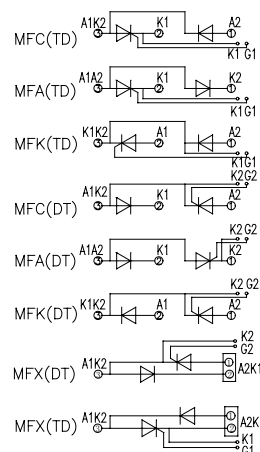
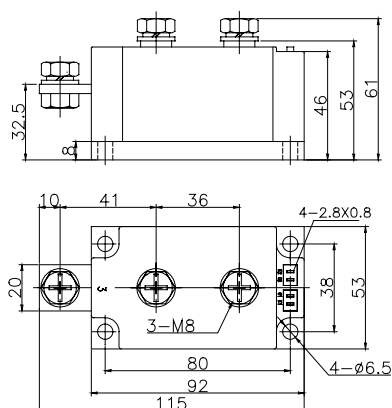
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$$\begin{array}{ll} I_{T(AV)} & 250A \\ V_{DRM}/V_{RRM} & 600\sim 1800V \\ I_{TSM} & 8.5A \times 10^3 \\ I^2t & 360A^2 S \times 10^3 \end{array}$$



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			250	A
$I_{T(RMS)}$	RMS on-state current		125			390	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			8.5	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				360	$A^2 s \times 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance					0.85	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 750A$	25			1.57	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		180	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1		2.5	V
I_H	Holding current			20		150	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125	0.2			V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.12	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.04	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}: 1mA(MAX)$		2500			V
F_m	Thermal connection torque(M5)				4		N·m
	Mounting torque(M6)				6		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				860		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

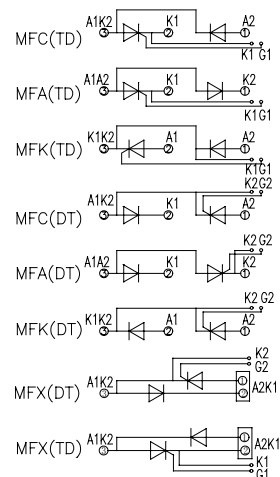
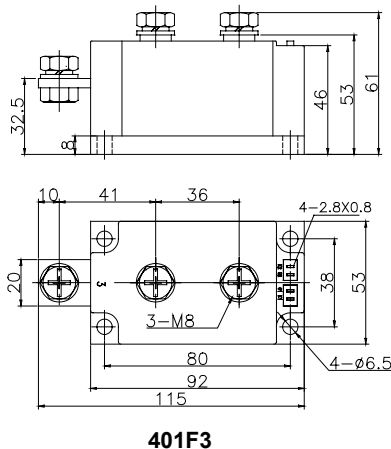
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ **250A**
 V_{DRM}/V_{RRM} **1900~3000V**
 I_{TSM} **8.5KA**
 I^2t **361A² S*10³**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			250	A
$I_{T(RMS)}$	RMS on-state current		125			393	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			8.50	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				361	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					0.93	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 750A$	25			1.73	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		180	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.120	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.04	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5)				4.5		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				930		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

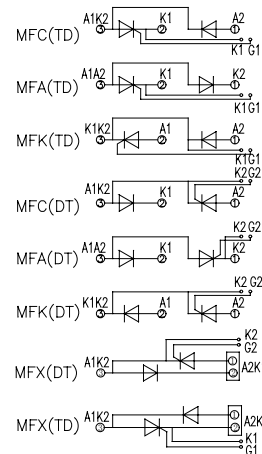
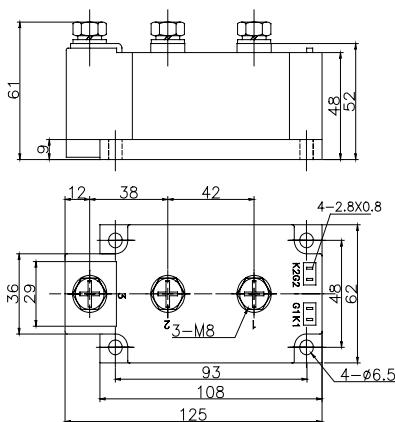
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$$\begin{array}{ll} I_{T(AV)} & 300A \\ V_{DRM}/V_{RRM} & 600\sim 1800V \\ I_{TSM} & 9.3A \times 10^3 \\ I^2t & 432A^2 S \times 10^3 \end{array}$$



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, $T_c=85^\circ\text{C}$	125			300	A
$I_{T(RMS)}$	RMS on-state current		125			471	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			40	mA
I_{TSM} I^2t	Surge on-state current I^2t for fusing coordination	10ms half sine wave $V_R=60\%V_{RRM}$	125			9.3 432	KA $A^2s \times 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance		125			0.72	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=900A$	25			1.58	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current			30		180	mA
V_{GT}	Gate trigger voltage	$V_A=12V, I_A=1A$	25	1		2.5	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM}=67\%V_{DRM}$	125	0.2			V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.1	°C / W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.04	°C / W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}:1mA(MAX)$		2500			V
F_m	Thermal connection torque(M5)				12		N·m
	Mounting torque(M6)				6		N·m
T_{stg}	Stored temperature			-40		125	°C
W_i	Weight				1350		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

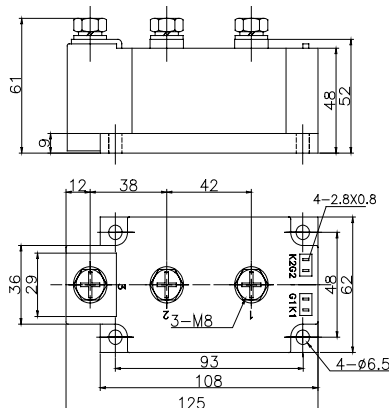
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ **300A**
 V_{DRM}/V_{RRM} **1900~3000V**
 I_{TSM} **9.3KA**
 I^2t **432tA² S*10³**

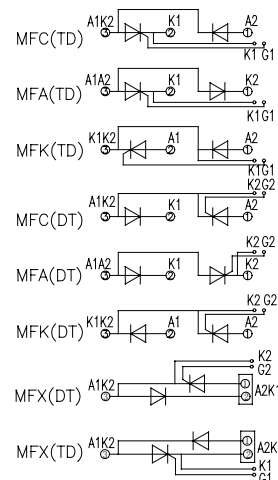


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			300	A
$I_{T(RMS)}$	RMS on-state current		125			471	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			50	mA
I_{TSM} I^2t	Surge on-state current I^2t for fusing coordination	10ms half sine wave $V_R = 60\% V_{RRM}$	125			9.3 432	KA A ² s*10 ³
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance					0.75	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 900A$	25			1.68	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		180	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1.0		3.0	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.091	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.04	°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5) Mounting torque(M6)				4.5 3.0		N·m N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				1340		g

Outline:



402F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

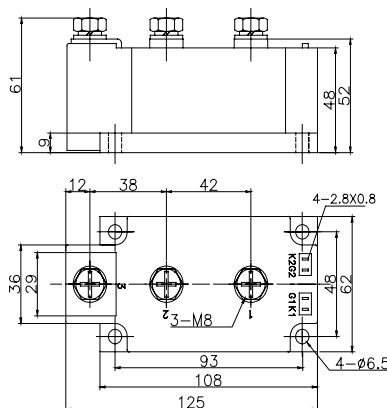
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 350A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 11KA
 I^2t 605A² S*10³

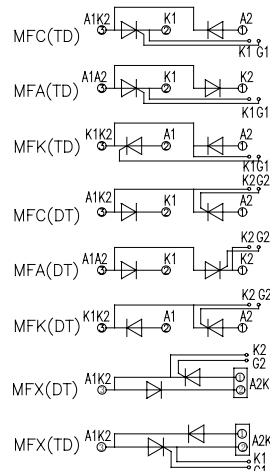


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			350	A
$I_{T(RMS)}$	RMS on-state current		125			550	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			11.0	KA
I^2t	I ² T for fusing coordination	$V_R = 60\% V_{RRM}$				605	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.95	V
r_T	On-state slop resistance					0.36	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 1050A$	25			1.45	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		180	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		2.5	V
I_H	Holding current			20		100	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.090	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.04	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} : 1mA(MAX)		3600			V
F_m	Thermal connection torque(M5)				4.5		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				1340		g

Outline:



402F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

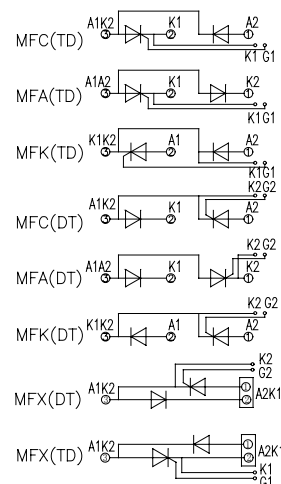
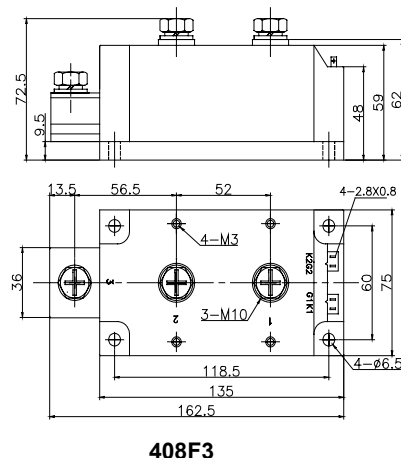
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 400A
 V_{DRM}/V_{RRM} 600~18t00V
 I_{TSM} 12KA
 I^2t 720A² S*10³



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			400	A
$I_{T(RMS)}$	RMS on-state current		125			628	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			12.0	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				720	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					0.49	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 1200A$	25			1.52	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		200	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		3.0	V
I_H	Holding current			20		150	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.080	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.024	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				6.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				2300		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

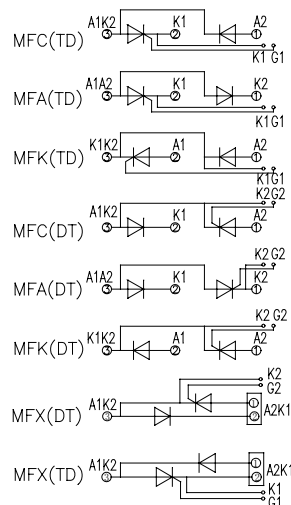
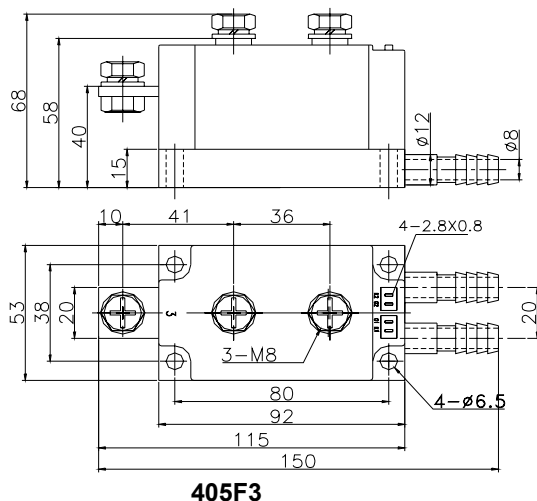
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 400A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 8.5KA
 I^2t 361A² S*10³



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			400	A
$I_{T(RMS)}$	RMS on-state current		125			628	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			8.50	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				361	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					0.80	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 1200A$	25			1.90	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		200	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1.0		3.0	V
I_H	Holding current			20		150	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.110	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				4.5		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				1300		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

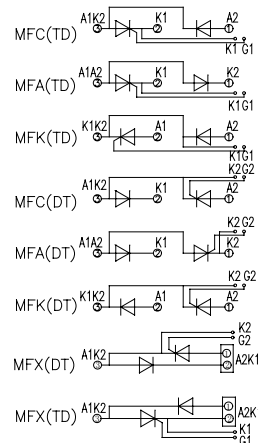
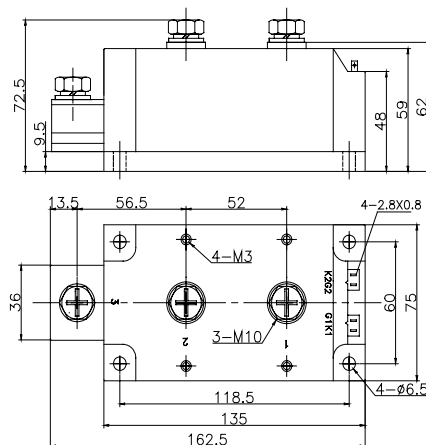
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 500A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} $16A \times 10^3$
 I^2t $1280A^2 S \times 10^3$



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			500	A
$I_{T(RMS)}$	RMS on-state current		125			785	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			16	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				1280	$A^2s \times 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance					0.34	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 1500A$	25			1.44	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current			30		200	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1		3	V
I_H	Holding current			20		150	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125	0.2			V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.065	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.024	°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				12		N·m
	Mounting torque(M6)				6		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				2300		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

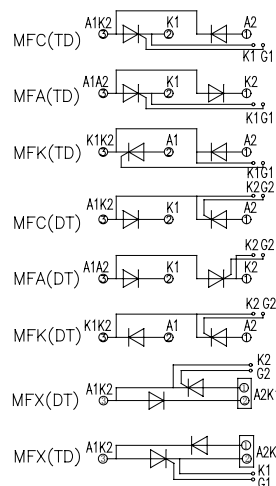
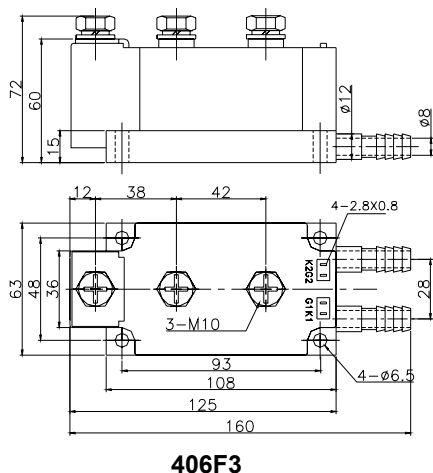
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 500A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 11KA
 I^2t 605A² S*10³



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			500	A
$I_{T(RMS)}$	RMS on-state current		125			785	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			11.0	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				605	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					0.64	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 1500A$	25			1.90	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		200	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		3.0	V
I_H	Holding current			20		150	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.087	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled					°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				4.5		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_i	Weight				1300		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

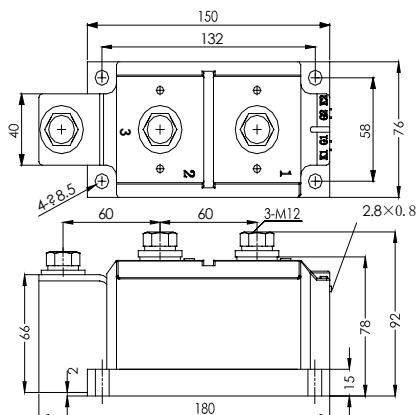
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 800A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 16KA
 I^2t 1280A² S*10³

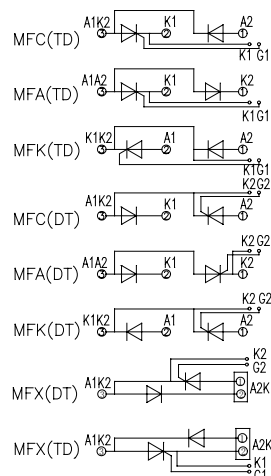


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			800	A
$I_{T(RMS)}$	RMS on-state current		125			1256	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			16.0	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				1280	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					0.42	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 2400A$	25			1.95	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		200	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		3.0	V
I_H	Holding current			20		150	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.015	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled					°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}: 1mA(MAX)$		2500			V
F_m	Thermal connection torque(M5)				7.5		N·m
	Mounting torque(M6)				4.5		N·m
T_{stg}	Stored temperature			-40		125	°C
W_i	Weight				3500		g

Outline:



410F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

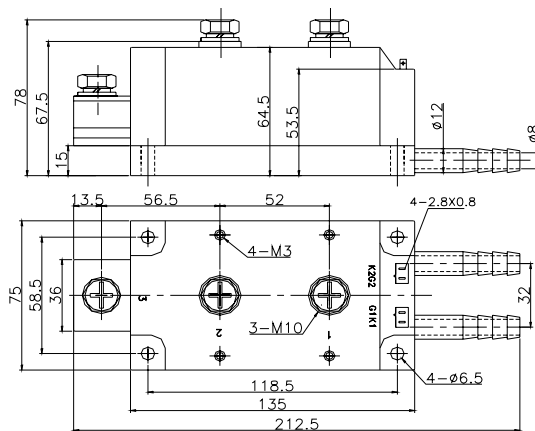
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 800A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 16KA
 I^2t 1280A² S*10³

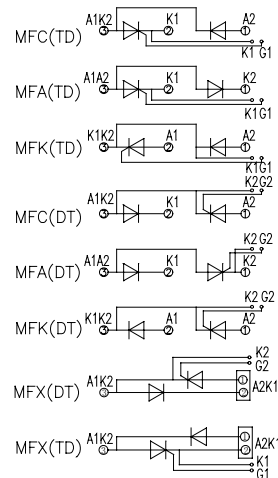


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			800	A
$I_{T(RMS)}$	RMS on-state current		125			1256	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			16.0	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				1280	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					0.42	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 2400A$	25			1.95	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		200	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		3.0	V
I_H	Holding current			20		150	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.054	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled					°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				6.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				2600		g

Outline:



409F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

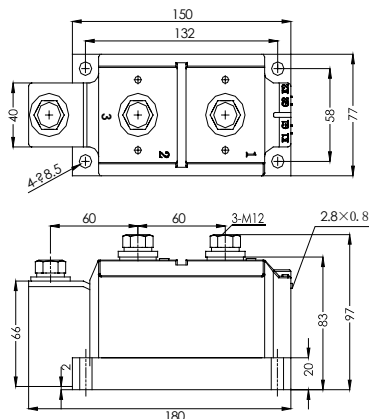
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 1000A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 20KA
 I^2t 2000A² S*10³

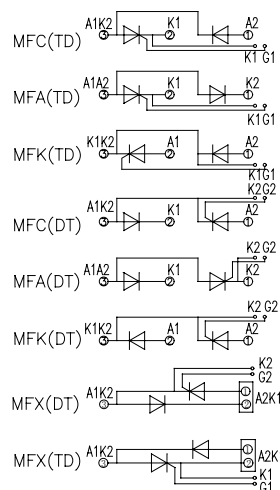


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			1000	A
$I_{T(RMS)}$	RMS on-state current		125			1570	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			60	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			20.0	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				2000	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					0.34	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 3000A$	25			1.96	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		200	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		3.0	V
I_H	Holding current			20		150	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.053	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled					°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				7.5		N·m
	Mounting torque(M6)				4.5		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				3800		g

Outline:



412F3



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

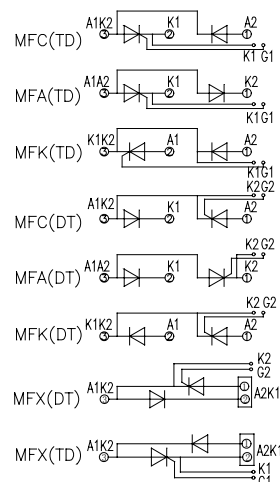
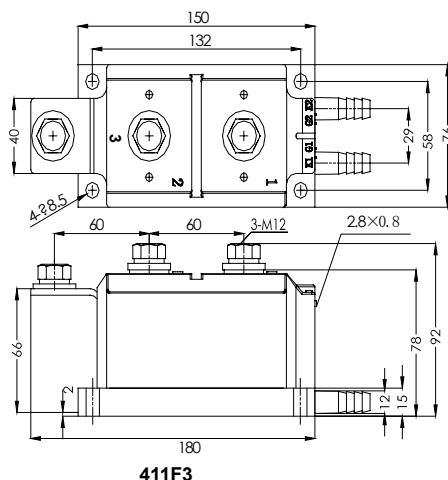
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 1000A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 20KA
 I^2t 2000A² S*10³



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			1000	A
$I_{T(RMS)}$	RMS on-state current		125			1570	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			50	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			20.0	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				2000	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					0.33	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 3000A$	25			1.95	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current			30		200	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	1.0		3.0	V
I_H	Holding current			20		150	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125				V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.052	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled					°C/W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso} : 1mA(MAX)$		2500			V
F_m	Thermal connection torque(M5)				7.5		N·m
	Mounting torque(M6)				4.5		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				3600		g

Outline:



Features:

- Isolated mounting base 2500V~
- Pressure contact technology with
- Incrtased power cycling capability
- Space and weight savings

Typical Applications:

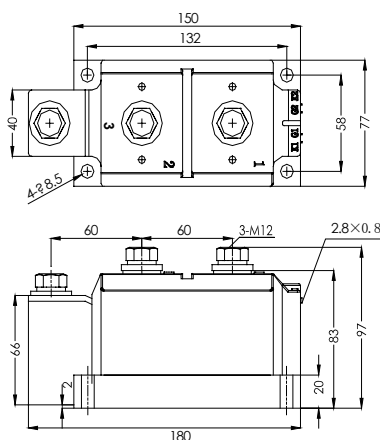
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$ 1200A
 V_{DRM}/V_{RRM} 600~1800V
 I_{TSM} 24KA
 I^2t 2800A² S*10³



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			1200	A
$I_{T(RMS)}$	RMS on-state current		125			1884	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} tp=10ms V_{DSM} & $V_{RSM} = V_{DRM}$ & $V_{RRM} + 200V$ respectively	125	600		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			70	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			24.0	KA
I^2t	I ² T for fusing coordination	$V_R = 60\% V_{RRM}$				2800	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					0.29	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 3000A$	25			1.98	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\% V_{DRM}$	125			800	V/μs
di/dt	Critical rate of rise of on-state current	Gate source 1.5A tr 0.5μs Repetitive	125			100	A/μs
I_{GT}	Gate trigger current		25	30		200	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		1.0		3.0	V
I_H	Holding current			20		150	mA
V_{GD}	Non-trigger gate voltage	$V_{DM} = 67\% V_{DRM}$	125			0.2	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.051	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled					°C /W
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} : 1mA(MAX)		2500			V
F_m	Thermal connection torque(M5)				7.5		N·m
	Mounting torque(M6)				4.5		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				3800		g

Outline:



412F3

