

Features:

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

Typical Applications:

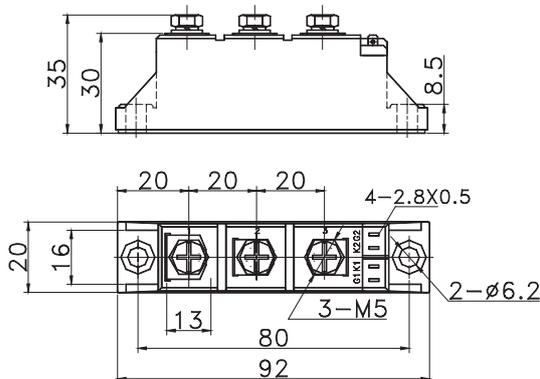
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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

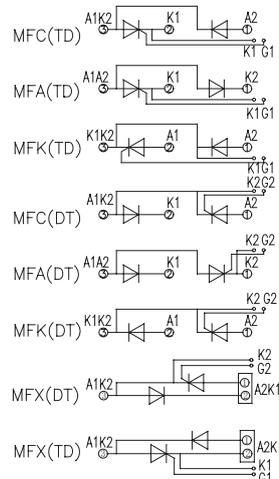


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			26	A
$I_{T(RMS)}$	RMS on-state current		125			41	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} & V_{RRM} \text{ tp}=10\text{ms}$ $V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} + 200\text{V}$ 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	$V_R = 60\% V_{RRM}$	125			1.50	$A^2s * 10^3$
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance		125			9.68	mΩ
V_{TM}	Peak on-state voltage	$I_{TM} = 80\text{A}$	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	$V_A = 12\text{V}, I_A = 1\text{A}$		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, $I_{iso} : 1\text{mA}(\text{MAX})$		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:



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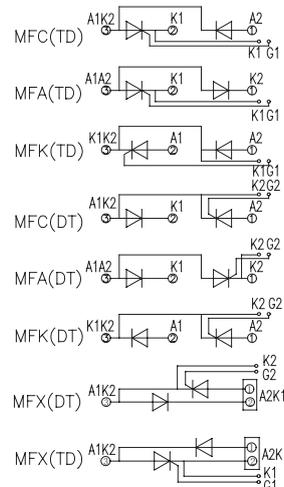
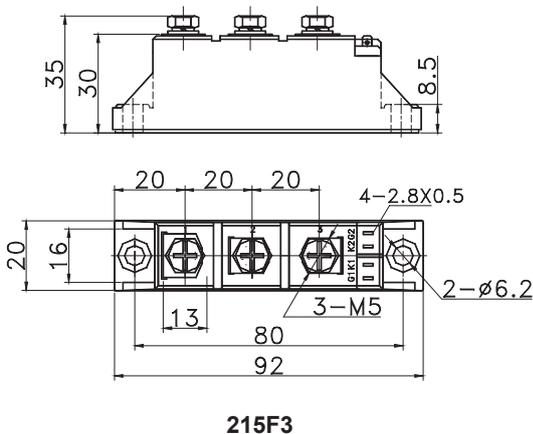
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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



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	$V_{DRM} \& V_{RRM} \text{ tp}=10\text{ms}$ $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200\text{V}$ 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	$V_R=60\%V_{RRM}$	125			5.0	$A^2s * 10^3$
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance		125			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	$V_A=12V, I_A=1A$	25	0.8		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				0.650	°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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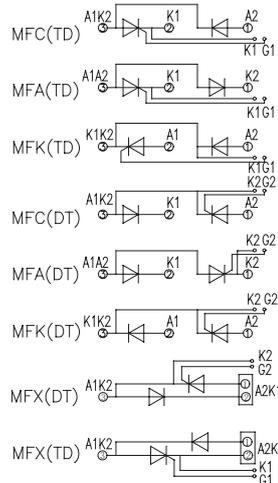
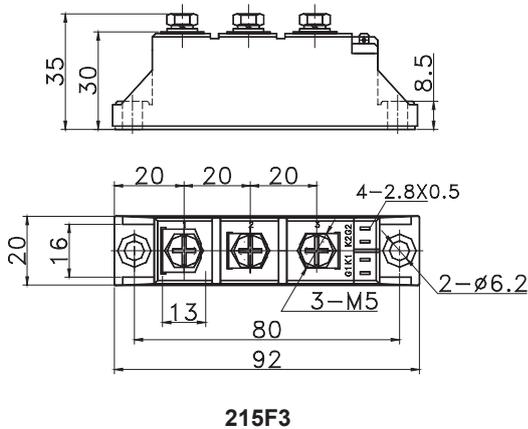
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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



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	$V_R = 60\% V_{RRM}$	125			7.80	$A^2s * 10^3$
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance		125			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	$V_A = 12V, I_A = 1A$	25	0.8		2.5	V
I_H	Holding current		25	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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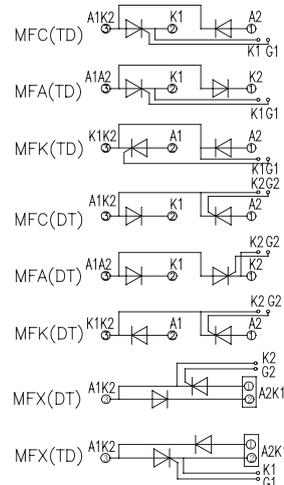
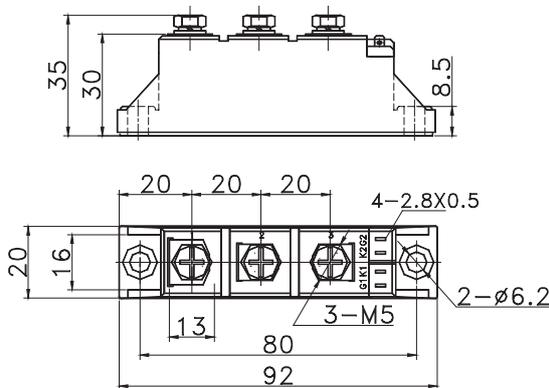
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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



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	$V_R = 60\% V_{RRM}$	125			7.8	$A^2s * 10^3$
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance		125			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	$V_A = 12V, I_A = 1A$	25	0.8		2.5	V
I_H	Holding current		25	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_{slg}	Stored temperature			-40		125	°C
W_t	Weight					100	g

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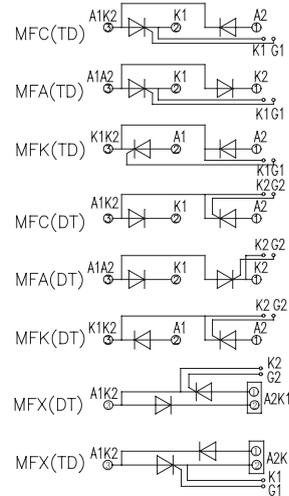
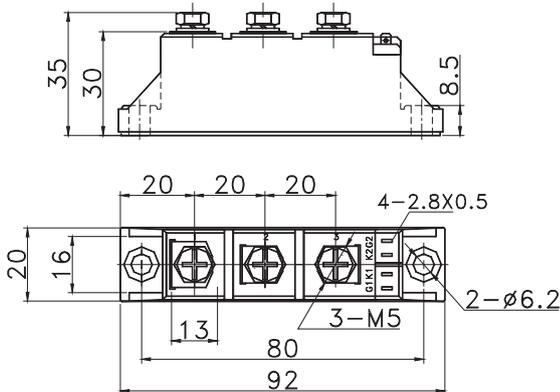
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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



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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			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	$V_{DRM} & V_{RRM} \text{ tp}=10\text{ms}$ $V_{Dsm} & V_{Rsm} = V_{DRM} & V_{RRM} + 200\text{V}$ 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	$V_R=60\%V_{RRM}$	125			6.60	$A^2s * 10^3$
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance		125			5.85	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=120\text{A}$	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	$V_A=12\text{V}, I_A=1\text{A}$	25	0.8		3.0	V
I_H	Holding current		25	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, $I_{iso}: 1\text{mA(MAX)}$		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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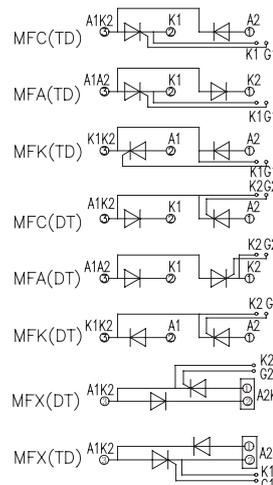
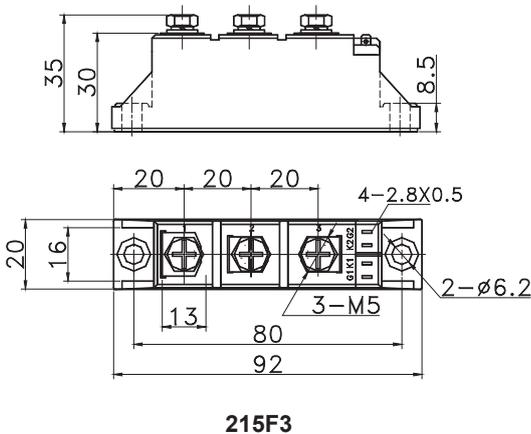
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	70A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	1.60KA
I^2t	$13A^2 \cdot S \cdot 10^3$



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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	$V_R = 60\% V_{RRM}$	125			13.0	$A^2 \cdot s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance		125			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	$V_A = 12V, I_A = 1A$	25	0.8		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				0.410	°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_t	Weight					115	g

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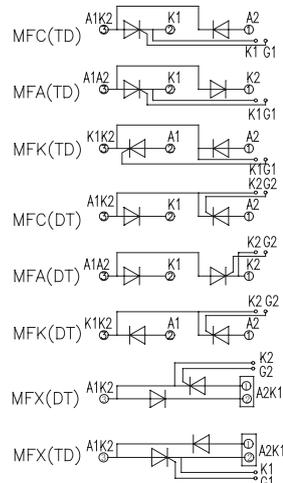
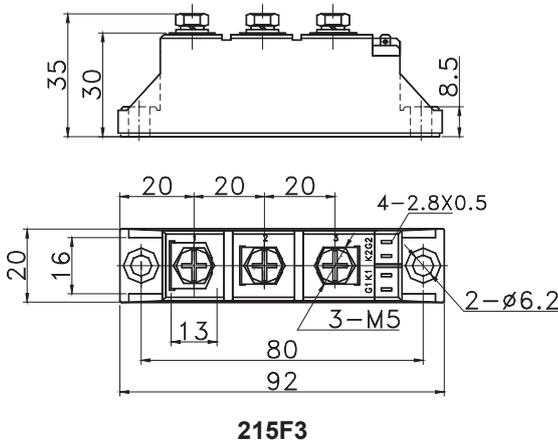
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I^2t	$13A^2 \cdot S \cdot 10^3$



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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	$A^2s \cdot 10^3$
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_{sig}	Stored temperature			-40		125	°C
W_t	Weight					115	g

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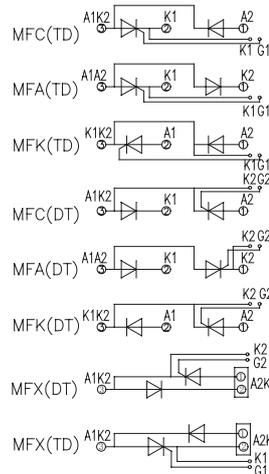
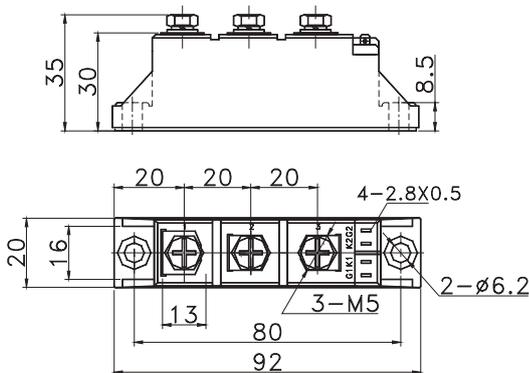
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I_{TSM}	1.60KA
I^2t	13A ² S*10 ³



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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	$V_R = 60\% V_{RRM}$	125			13.0	A ² s*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

Outline:



Features:

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

Typical Applications:

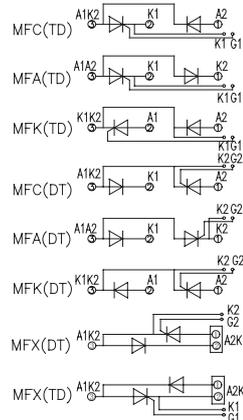
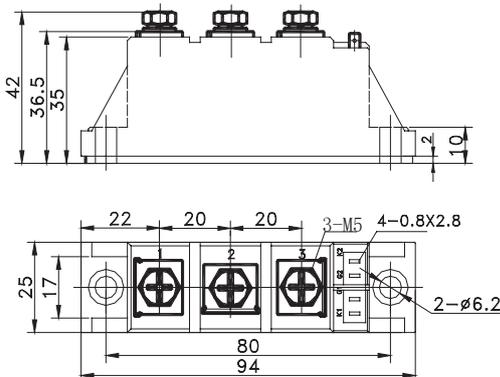
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	90A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	$2.0A \times 10^3$
I^2t	$20.4A^2 \cdot S \times 10^3$



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			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^2t	I^2T for fusing coordination	$V_R=60\%V_{RRM}$	125			20.4	$A^2 \cdot s \times 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance		125			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		25	30		100	mA
V_{GT}	Gate trigger voltage	$V_A=12V, I_A=1A$		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
$R_{th(c-h)}$	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)					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:

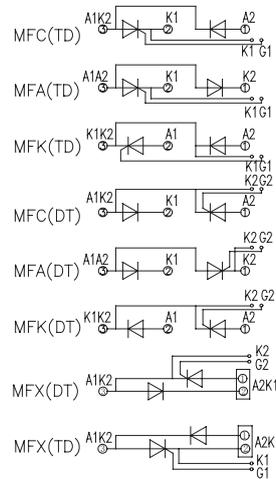
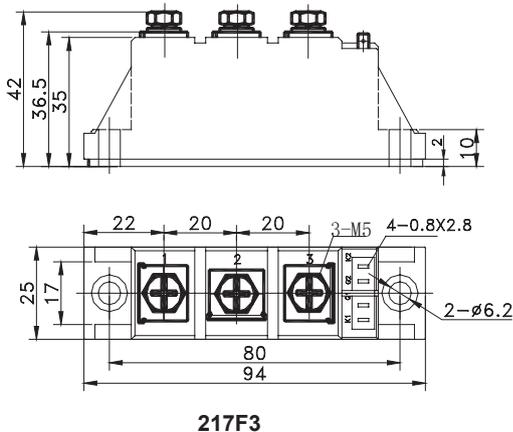
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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



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	$V_{DRM} & V_{RRM} \text{ tp}=10\text{ms}$ $V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} + 200\text{V}$ 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	$V_R=60\%V_{RRM}$	125			20	$A^2s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance		125			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:



Features:

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

Typical Applications:

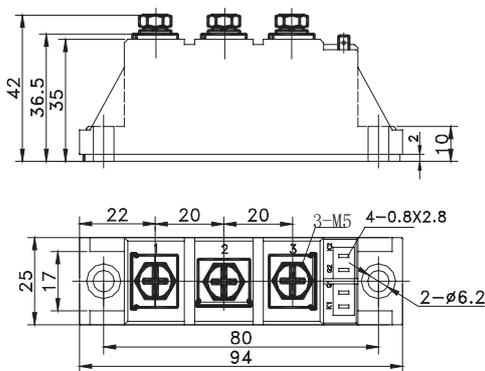
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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

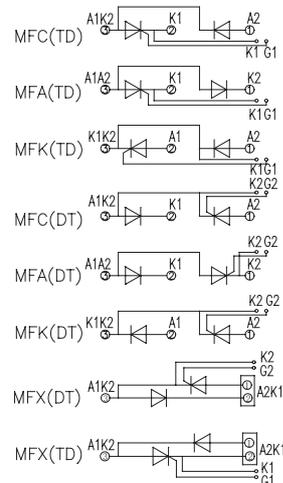


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			90	A
$I_{T(RMS)}$	RMS on-state current		125			141	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM} \ t_p=10ms$ $V_{DSM} \ & V_{RSM} = V_{DRM} \ & V_{RRM} + 200V$ respectively	125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			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^2s*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			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:



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Features:

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

Typical Applications:

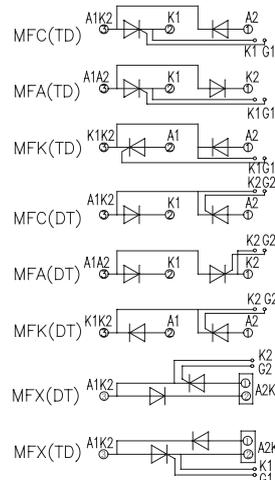
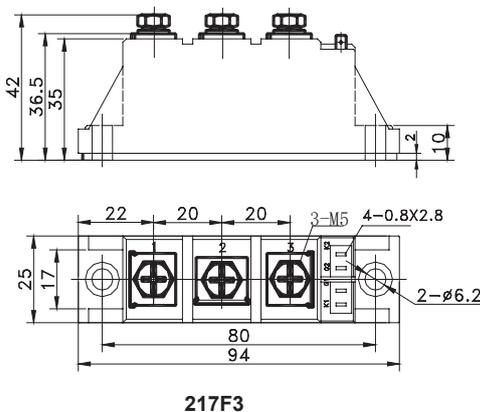
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	110A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	2.44KA
I^2t	$29A^2 S * 10^3$



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			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	$V_{DRM} & V_{RRM} \text{ tp}=10\text{ms}$ $V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} + 200\text{V}$ 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^2T for fusing coordination	$V_R = 60\% V_{RRM}$				29	$A^2s * 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance					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			30		100	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				0.250	°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:



Features:

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

Typical Applications:

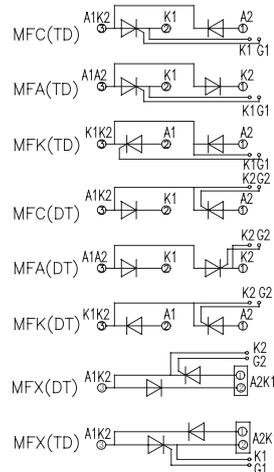
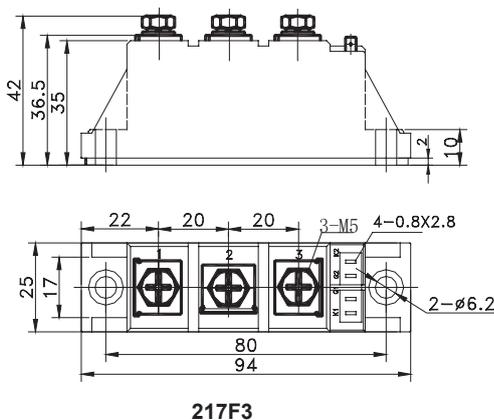
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _J (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, T _c =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	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 ² T for fusing coordination	$V_R = 60\% V_{RRM}$				29	A ² s*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	°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:



Features:

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

Typical Applications:

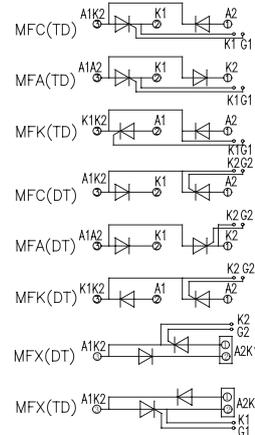
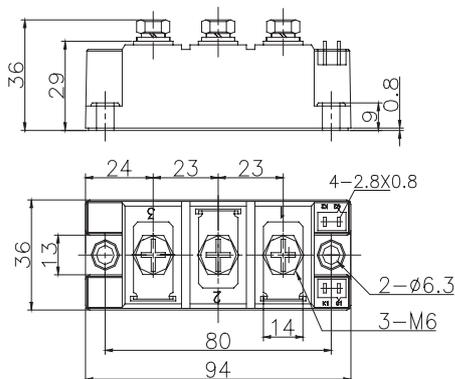
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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



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			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	$V_{DRM} & V_{RRM} t_p = 10ms$ $V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} + 200V$ 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		25	30		100	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$		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_t	Weight					320	g

Outline:



Features:

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

Typical Applications:

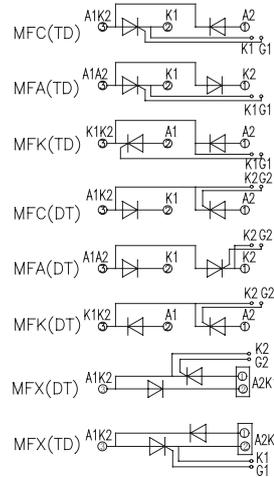
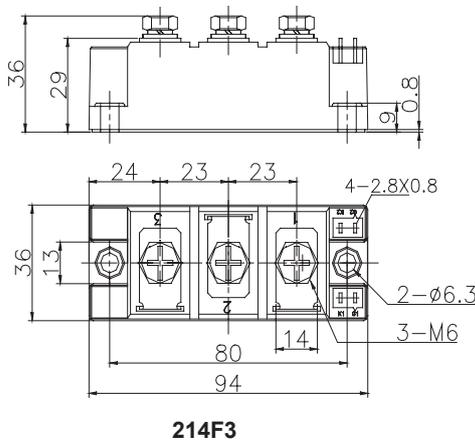
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	135A
V_{DRM} / V_{RRM}	1900~3000V
I_{TSM}	3.8KA
I^2t	$72A^2 S * 10^3$



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			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	$V_R=60\%V_{RRM}$	125			72	$A^2s * 10^3$
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		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
$R_{th(f-c)}$	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:



Features:

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

Typical Applications:

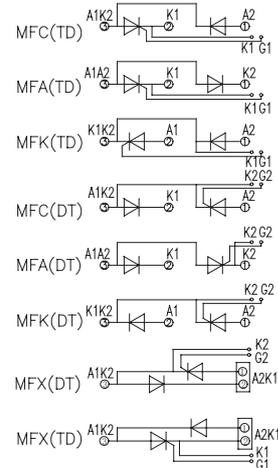
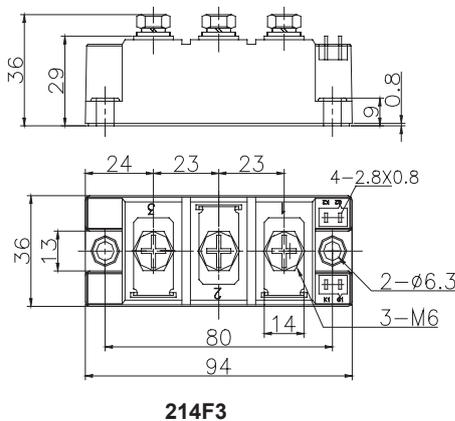
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	160A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	5.4KA
I^2t	$146A^2 S * 10^3$



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			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}	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	$A^2s * 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance					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			30		150	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				0.170	°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)					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
- Increased power cycling capability
- Space and weight savings

Typical Applications:

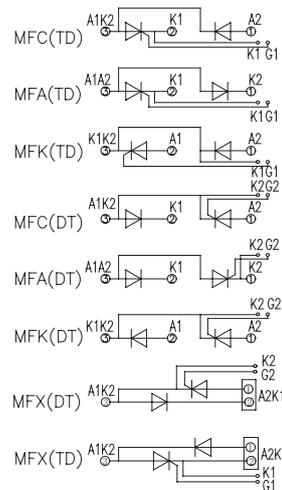
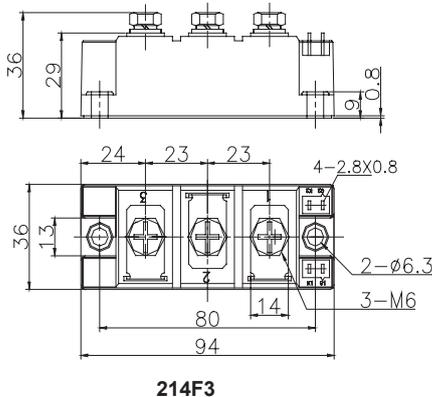
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	160A
V_{DRM} / V_{RRM}	1900~3000V
I_{TSM}	5.4KA
I^2t	$146A^2 S \cdot 10^3$



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			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	$A^2s \cdot 10^3$
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	$V_A = 12V, I_A = 1A$	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				0.170	°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:

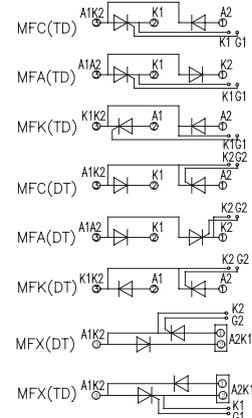
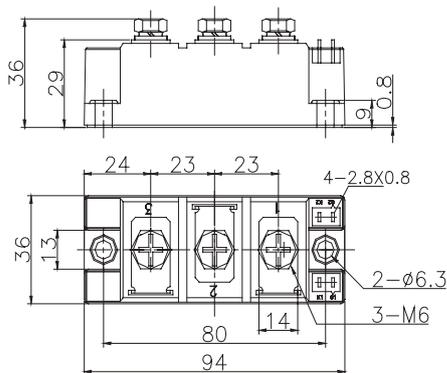
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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



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			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	$V_{DRM} \& V_{RRM} \text{ tp}=10\text{ms}$ $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200\text{V}$ respectively	125	600		1800	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			5.8	KA
I^2t	I^2T for fusing coordination	$V_R=60\%V_{RRM}$				168	$A^2s \times 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance					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	$V_A=12V, I_A=1A$	25	30		150	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				0.16	°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)					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:

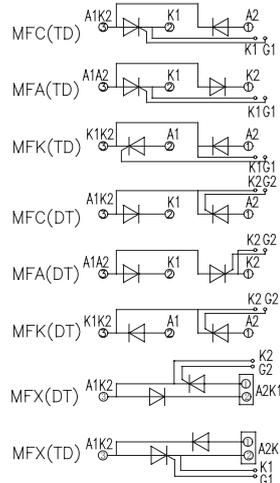
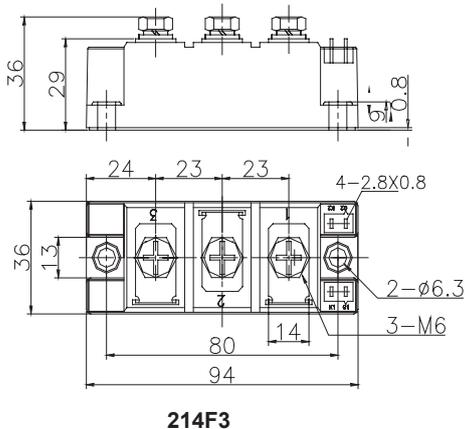
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	182A
V_{DRM} / V_{RRM}	1900~3000V
I_{TSM}	5.8KA
I^2t	$168A^2 S*10^3$



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			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	$V_R=60\%V_{RRM}$	125			168	A^2s*10^3
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance		125			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		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		25	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_{stq}	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:

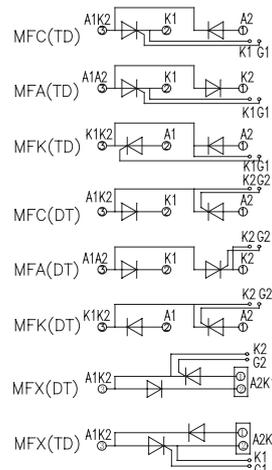
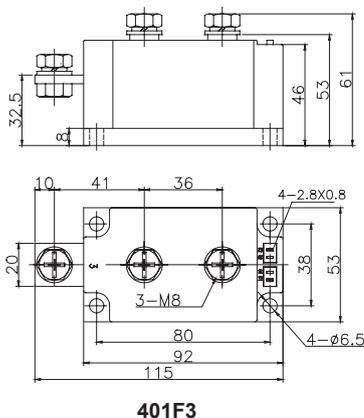
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	200A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	7.2KA
I^2t	$259A^2 S \cdot 10^3$



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			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	$V_{DRM} & V_{RRM} \text{ tp}=10\text{ms}$ $V_{Dsm} & V_{Rsm} = V_{DRM} & V_{RRM} + 200\text{V}$ 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^2T for fusing coordination	$V_R = 60\% V_{RRM}$				259	$A^2s \cdot 10^3$
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:

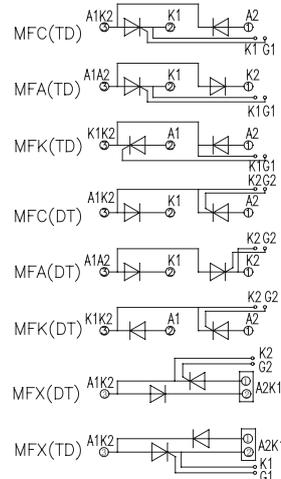
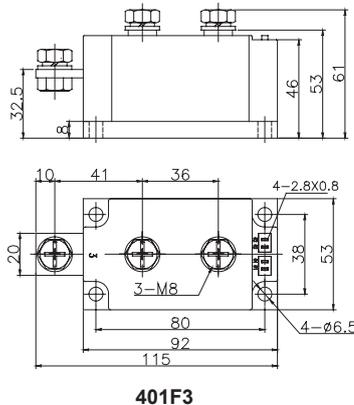
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	200A
V_{DRM} / V_{RRM}	1900~3000V
I_{TSM}	7.2KA
I^2t	$259A^2 S * 10^3$



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			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	$V_{DRM} & V_{RRM} \text{ tp}=10\text{ms}$ $V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} + 200\text{V}$ 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	$V_R = 60\% V_{RRM}$	125			259	$A^2s * 10^3$
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance		125			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		25	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:

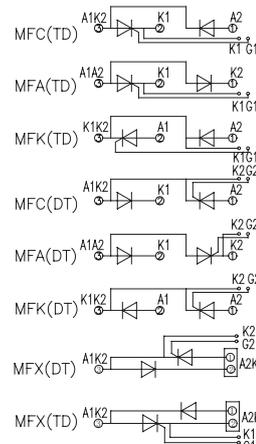
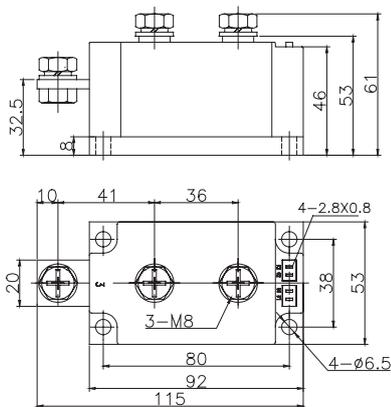
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	250A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	$8.5A \times 10^3$
I^2t	$360A^2 S^* 10^3$



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			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	$A^2s^* 10^3$
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			30		180	mA
V_{GT}	Gate trigger voltage	$V_A = 12V, I_A = 1A$	25	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
$R_{th(i-c)}$	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:

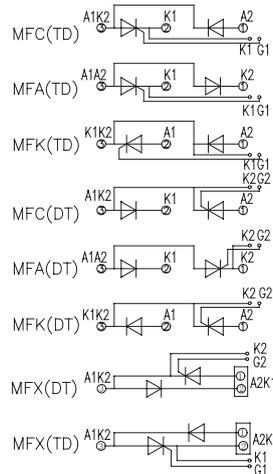
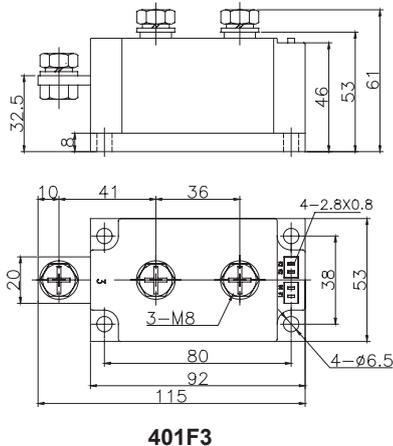
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	250A
V_{DRM} / V_{RRM}	1900~3000V
I_{TSM}	8.5KA
I^2t	$361A^2 S * 10^3$



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			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	$A^2s * 10^3$
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	$V_A = 12V, I_A = 1A$	25	30		180	mA
V_{GT}	Gate trigger voltage			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:

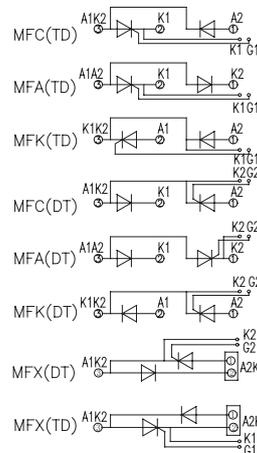
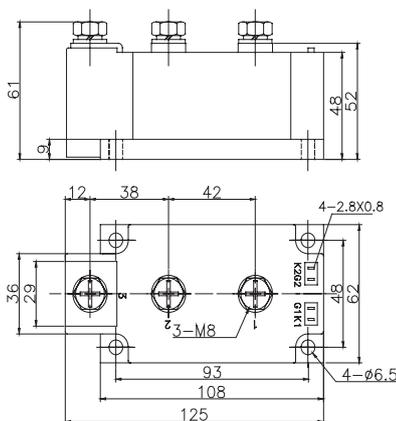
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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



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			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	$V_{DRM} & V_{RRM} t_p=10ms$ $V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} + 200V$ 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			9.3	KA
I^2t	I^2T for fusing coordination	$V_R=60\%V_{RRM}$				432	$A^2s \times 10^3$
V_{TO}	Threshold voltage		125			0.8	V
r_T	On-state slop resistance					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_t	Weight					1350	g

Outline:



Features:

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

Typical Applications:

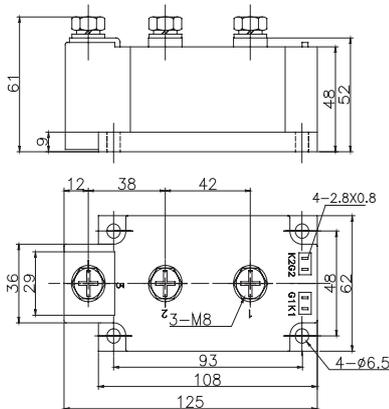
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	300A
V_{DRM} / V_{RRM}	1900~3000V
I_{TSM}	9.3KA
I^2t	432A ² S*10 ³

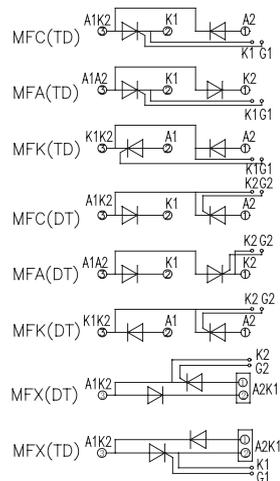


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			300	A
$I_{T(RMS)}$	RMS on-state current		125			471	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} & V_{RRM} \text{ tp}=10\text{ms}$ $V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} + 200\text{V}$ respectively	125	1900		3000	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			9.3	KA
I^2t	I^2T for fusing coordination	$V_R=60\%V_{RRM}$	125			432	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slop resistance		125			0.75	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=900\text{A}$	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	$V_A=12\text{V}, I_A=1\text{A}$	25	30		180	mA
V_{GT}	Gate trigger voltage			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)					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:

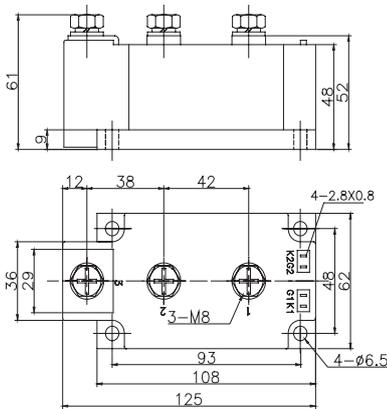
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	350A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	11KA
I^2t	$605A^2 S^*10^3$

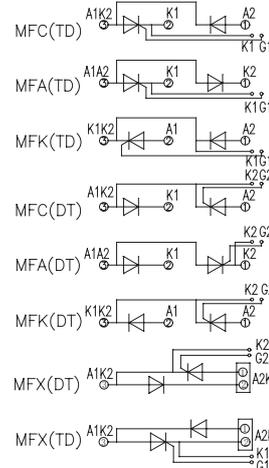


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			350	A
$I_{T(RMS)}$	RMS on-state current		125			550	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} & V_{RRM} tp=10ms$ $V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} + 200V$ 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^2T for fusing coordination	$V_R=60\%V_{RRM}$				605	$A^2s^*10^3$
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	$V_A=12V, I_A=1A$	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				0.090	°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:

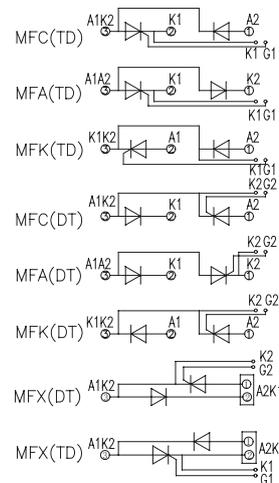
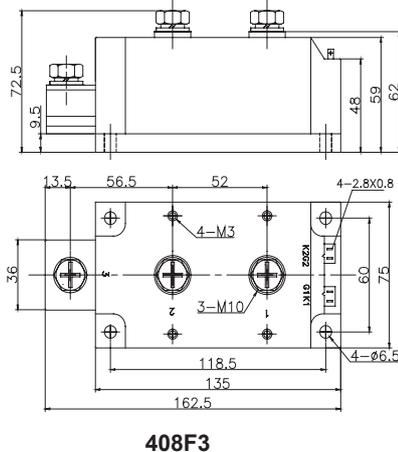
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	400A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	12KA
I^2t	$720A^2 S \cdot 10^3$



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			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	$V_{DRM} \& V_{RRM} \text{ tp}=10\text{ms}$ $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200\text{V}$ 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	$A^2s \cdot 10^3$
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			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			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:

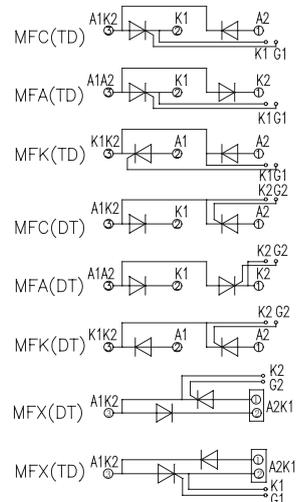
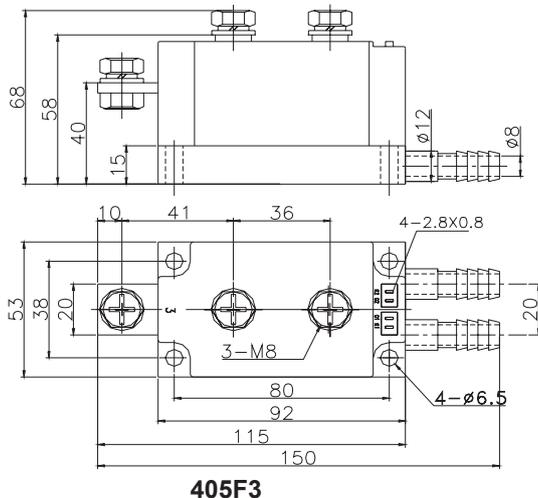
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	400A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	8.5KA
I^2t	$361A^2 S * 10^3$



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			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	$V_{DRM} \& V_{RRM} \text{ tp}=10\text{ms}$ $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 200\text{V}$ 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	$V_R=60\%V_{RRM}$	125			361	$A^2s * 10^3$
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance		125			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	$V_A=12V, I_A=1A$	25	30		200	mA
V_{GT}	Gate trigger voltage			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:

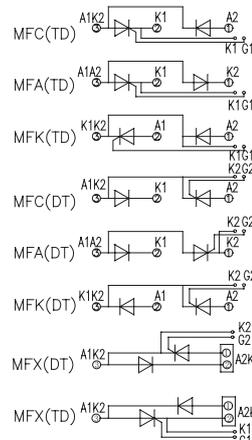
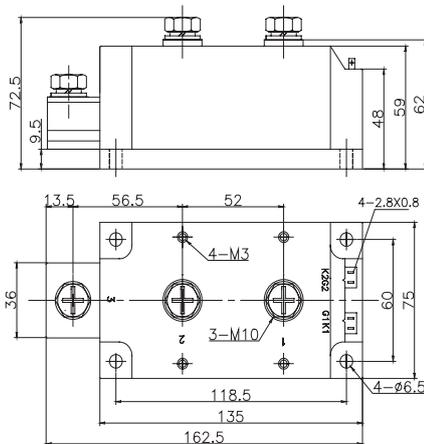
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	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		25	30		200	mA
V_{GT}	Gate trigger voltage	$V_A=12V, I_A=1A$	25	1		3	V
I_H	Holding current		25	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:

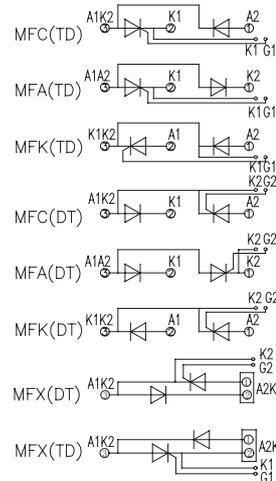
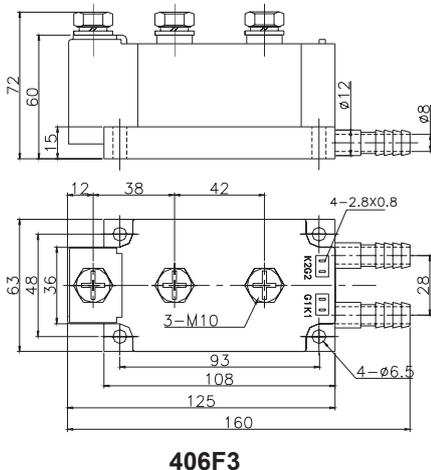
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	500A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	11KA
I^2t	$605A^2 S * 10^3$



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			11.0	KA
I^2t	I^2T for fusing coordination	$V_R = 60\% V_{RRM}$				605	$A^2s * 10^3$
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			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				0.087	°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_t	Weight					1300	g

Outline:



Features:

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

Typical Applications:

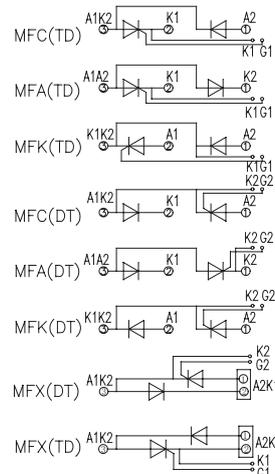
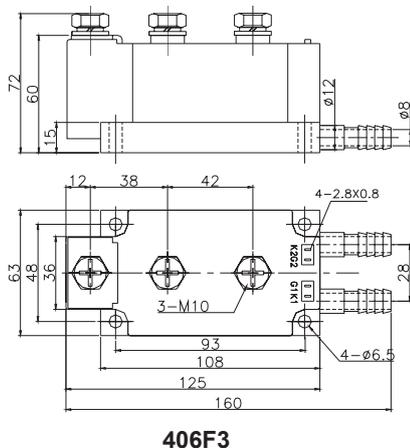
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	600A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	13KA
I^2t	$845A^2 S*10^3$



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			600	A
$I_{T(RMS)}$	RMS on-state current		125			942	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			13.0	KA
I^2t	I^2T for fusing coordination	$V_R=60\%V_{RRM}$				845	A^2s*10^3
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance					0.53	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=1800A$	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		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				0.073	°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					1820	g

Outline:



Features:

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

Typical Applications:

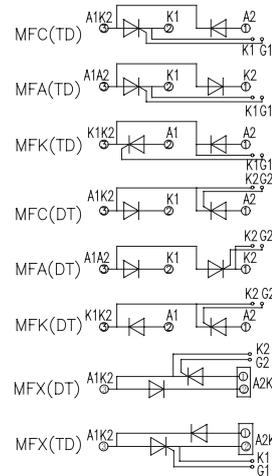
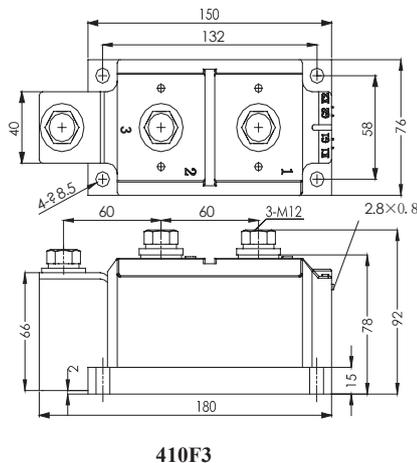
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	800A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	16KA
I^2t	1280A ² S*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			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			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				0.015	°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_{slg}	Stored temperature			-40		125	°C
W_t	Weight					3500	g

Outline:



Features:

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

Typical Applications:

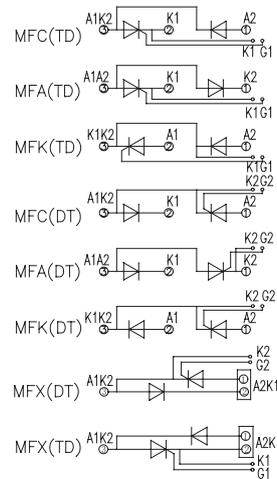
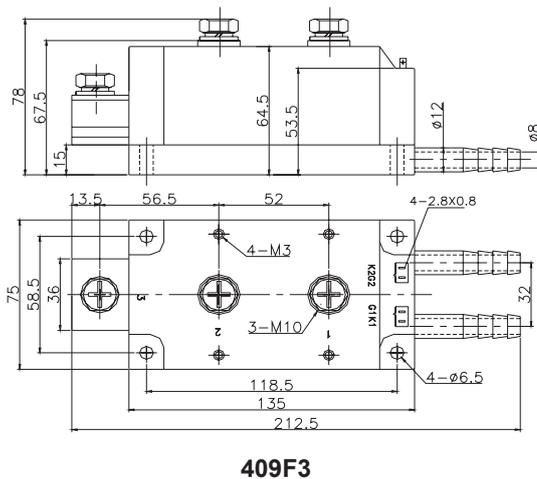
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	800A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	16KA
I^2t	1280A ² S*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			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 ² T for fusing coordination	$V_R = 60\% V_{RRM}$	125			1280	A ² s*10 ³
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slop resistance		125			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	$V_A = 12V, I_A = 1A$	25	1.0		3.0	V
I_H	Holding current		125	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:



Features:

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

Typical Applications:

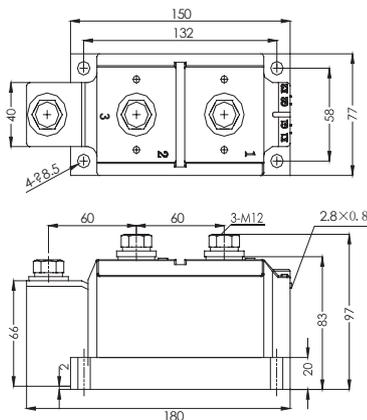
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	1000A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	20KA
I^2t	2000A ² S*10 ³

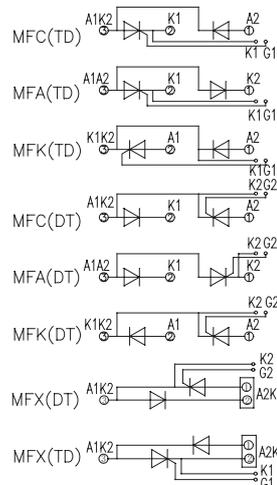


SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, Tc=85°C	125			1000	A
$I_{T(RMS)}$	RMS on-state current		125			1570	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	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 ² T 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			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				0.053	°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:



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Features:

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

Typical Applications:

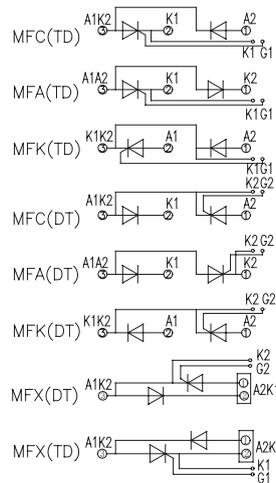
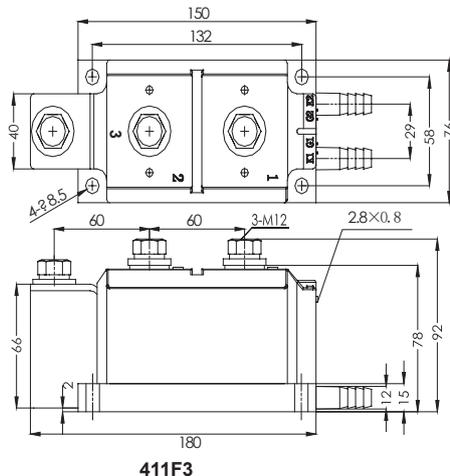
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	1000A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	20KA
I^2t	$2000A^2 S * 10^3$



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			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	$A^2s * 10^3$
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		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				0.052	°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_{slg}	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:

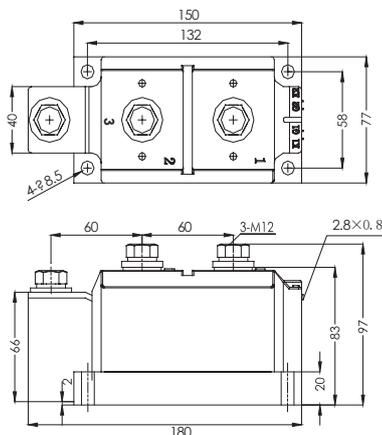
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

$I_{T(AV)}$	1200A
V_{DRM} / V_{RRM}	600~1800V
I_{TSM}	24KA
I^2t	$2800A^2 S*10^3$



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			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^2T for fusing coordination	$V_R=60\%V_{RRM}$				2800	A^2s*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	$V_A=12V, I_A=1A$	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			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:



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