Features：

- Isolated mounting base 2500V~
- Simple design，Module and SCR rectifier bridge，Small volume, light weight

Typical Applications：

- Supplies for DC power equipment
- Field supply for DC motors
- Inverter welder

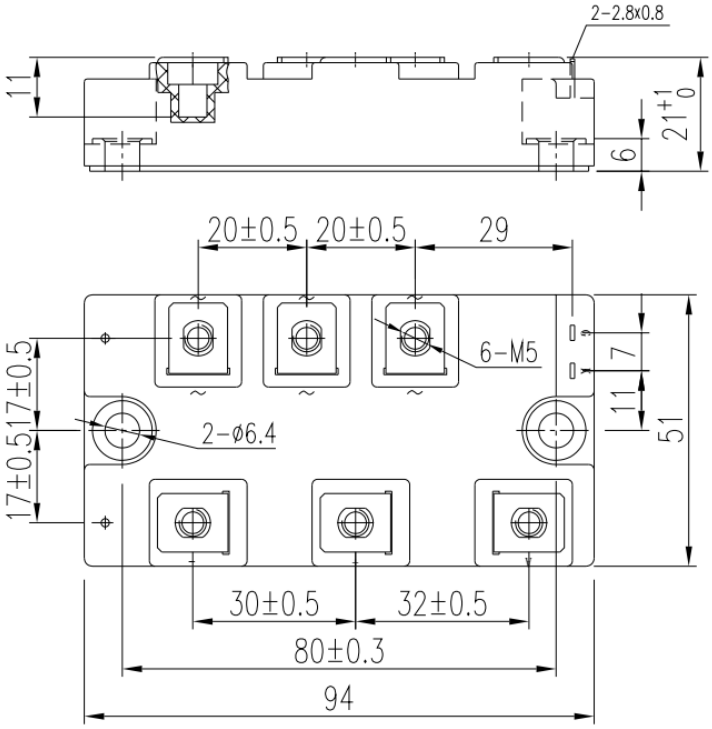
V_{DRM} /V_{RRM}	品名
600V	MG50TH60S
800V	MG50TH80S
1000V	MG50TH100S
1200V	MG50TH120S
1400V	MG50TH140S
1600V	MG50TH160S
1800V	MG50TH180S

Diode

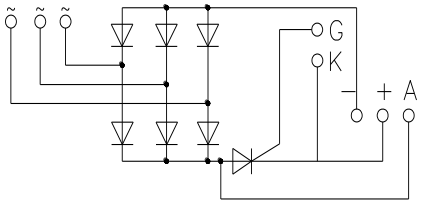
SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j(°C)	VALUE			UNIT
				Min.	Typ.	Max.	
I_D	DC output current	Three-phase full wave rectifying circuit, T_C=100°C	125			50	A
V_{RRM}	Repetitive peak reverse voltage	tp=10ms	125	600		1800	V
I_{RRM}	Repetitive peak current	at V_{RRM}	125			8	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0	125			0.4	kA
I^2t	I^2t for fusing coordination					0.8	10^3A^2s
V_{FO}	Threshold voltage		125			0.85	V
r_F	Forward slope resistance					4.30	mΩ
V_{FM}	Peak forward voltage	I_{FM}=50A	25			1.20	V
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Single side cooled, per chip				0.30	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	D.C. Single side cooled, per chip				0.07	°C/W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(max)		3000			V
F_m	Terminal connection torque(M5)			2.4		3.0	N·m
	Mounting torque(M6)			3.5		5.0	N·m
T_{vj}	Junction temperature			-40		125	°C
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				220		g
Outline	M32						

Thyristor

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j(°C)	VALUE			UNIT
				Min.	Typ.	Max.	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, T_c=100°C	125			50	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms	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 V_R=60%V_{RRM}	125			0.4	kA
I^2t	I^2t for fusing coordination					0.8	10^3A^2s
V_{TO}	Threshold voltage		125			0.85	V
r_T	On-state slope resistance					4.3	mΩ
I_{GT}	Gate trigger current	V_A=12V, I_A=1A	25	30		200	mA
V_{GT}	Gate trigger voltage			0.6		2.5	V
I_H	Holding current			10		250	V
I_L	Latching current					1000	mA
V_{GD}	Non-trigger gate voltage	V_{DM}=67%V_{DRM}	125			0.30	V
V_{TM}	Peak on-state voltage	I_{TM}=150A				1.55	V
dv/dt	Critical rate of rise of off-state voltage	V_{DM}=67%V_{DRM}	125			500	V/μs
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Single side cooled, per chip				0.80	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	D.C. Single side cooled, per chip				0.13	°C /W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(MAX)		3000			V
F_m	Terminal connection torque(M5)			2.5		4.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
T_{vj}	Junction temperature			-40		125	°C
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				220		g
Outline	M32						



Unmarked dimensional tolerance：±0.5mm



MG50TH**S