

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

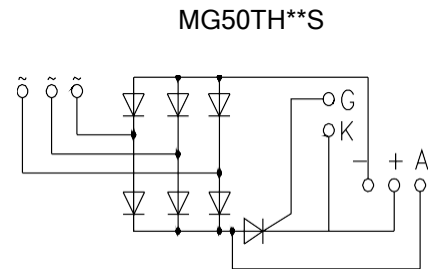
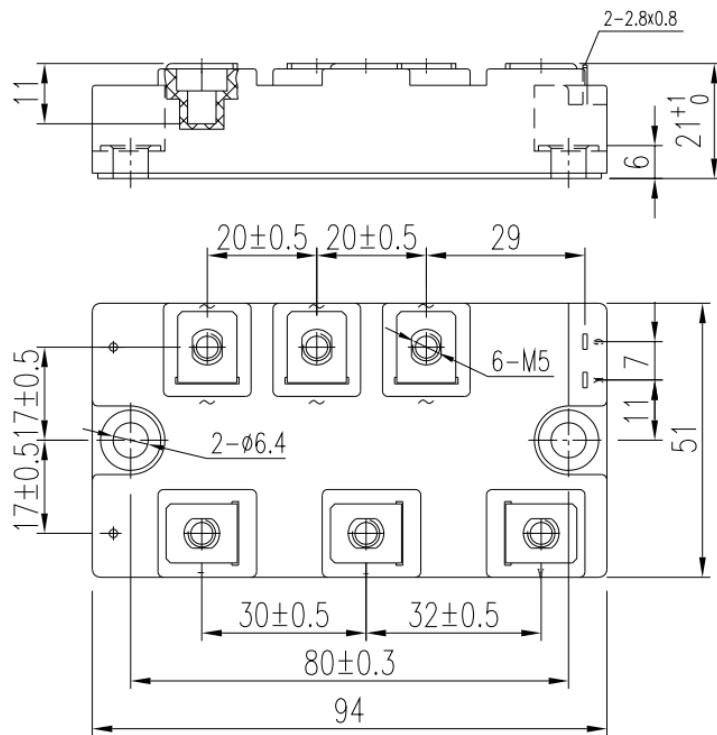
Diode

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min	Type	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	125			0.4	kA
I ² t	I ² t for fusing coordination	V _R =0				0.8	10 ³ A ² s
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)		2500			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	Type	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 _{R_{RRM}}	Repetitive peak off-state voltage Repetitive peak reverse voltage	t _p =10ms	125	600		1800	V
I _{DRM} I _{R_{RRM}}	Repetitive peak current	at V _{DRM} at V _{R_{RRM}}	125			15	mA
I _{TSM}	Surge on-state current	10ms half sine wave	125			0.4	kA
I ² t	I ² t for fusing coordination	V _R =60%V _{R_{RRM}}					0.8
V _{TO}	Threshold voltage		125			0.85	V
r _T	On-state slope resistance						4.3
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)		2500			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 _{sig}	Stored temperature			-40		125	°C
W _t	Weight				220		g
Outline	M32						

Outline :



Unmarked dimensional tolerance: ±0.5mm