

产品规格书

Specification of Products

产品名称：多功能集成模块

产品型号：MDST150A

浙江芯芯电子有限公司

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MDST150A

■ 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	150		150		A
V _{RRM}	Repetitive peak reverse voltage	V _{RRM} tp=10ms V _{RSM} = V _{DRM} &V _{RRM} +200V	150	800		2400	V
I _{RRM}	Repetitive peak current	at V _{RRM}	150			15	mA
I _{FSM}	Surge forward current	10ms half sine wave	150			1.6	KA
I ² t	I ² T for fusing coordination	V _R =0.6V _{RRM}					16.4
V _{FO}	Threshold voltage		150			0.80	V
r _F	Forward slop resistance						4.5
V _{FM}	Peak forward voltage	I _{FM} =100A	25			1.25	V
R _{th(j-c)}	Thermal resistance Junction to heatsink	Single side cooled				0.140	°C/W
V _{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I _{iso} :1mA(max)		2500			V
F _m	Terminal connection torque(M5)					2.8	N.m
	Mounting torque(M6)					4.8	N.m
T _{stg}	Stored temperature			-40		125	°C

■ THYRISTOR

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min	Type	Max	
I _{T(AV)}	Mean on-state current	180° half sinewave 50Hz Single side cooled, T _C =85 °C	125		150		A
I _{T(RMS)}	RMS on-state current	Single side cooled, T _C =85 °C	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	800		2400	V
I _{DRM} I _{RRM}	Repetitive peak current	at V _{DRM} at V _{RRM}	125			80	mA
I _{TSM}	Surge on-state current	10ms half sinewave	125			2.40	KA
I ² t	I ² T for fusing coordination	V _R =60%V _{RRM}					14.9
V _{TO}	Threshold voltage		125			0.8	V
r _T	On-state slop resistance						1.69
V _{TM}	Peak on-state voltage	I _{TM} =480A	125			1.40	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =67%V _{DRM}	125			600	V/μs
di/dt	Critical rate of rise of on-state current	From 67%V _{DRM} to 480A, Gate source 1.5A t _r ≤0.5μs Repetitive	125			120	A/μs

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SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min	Type	Max	
I _{GT}	Gate trigger current	V _A =12 V, I _A =1A	25	30		150	mA
V _{GT}	Gate trigger voltage			1.0		3.0	V
I _H	Holding current			20		100	mA
V _{GD}	Non-trigger gate voltage	At 67%V _{DRM}	125			0.2	V
R _{th(j-c)}	Thermal resistance Junction to heatsink	At 180° sine Single side cooled				0.170	°C/W
V _{iso}	Isolation voltage	50Hz, R.M. S, t=1min, I _{iso} :1mA (MAX)		2500			V
F _m	Thermal connection torque (M6)				3.0		N.m
	Mounting torque (M6)				3.0		N.m
T _{stg}	Stored temperature			-40		140	°C
W _t	Weight				450		g
Outline	M44						

Rating and Characteristic

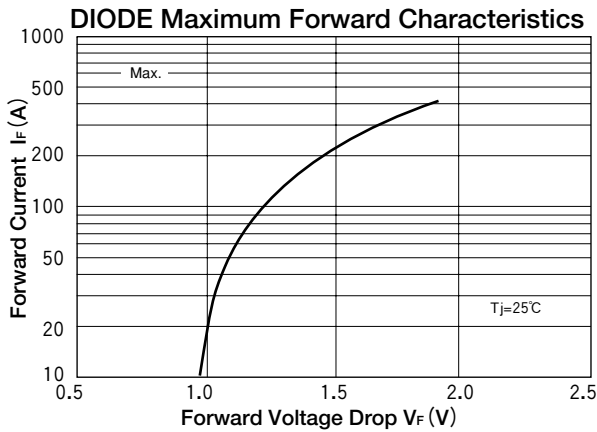


Fig.1

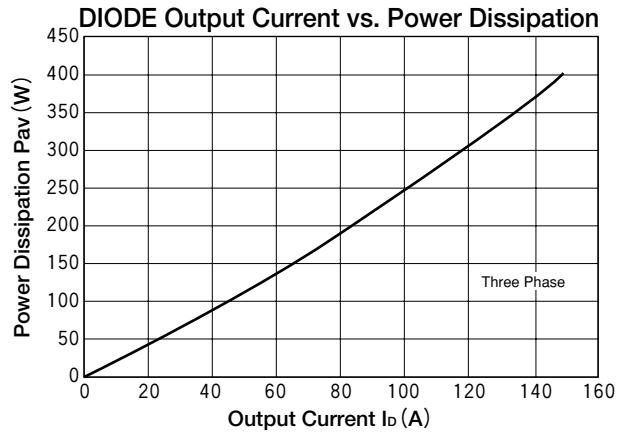


Fig.2

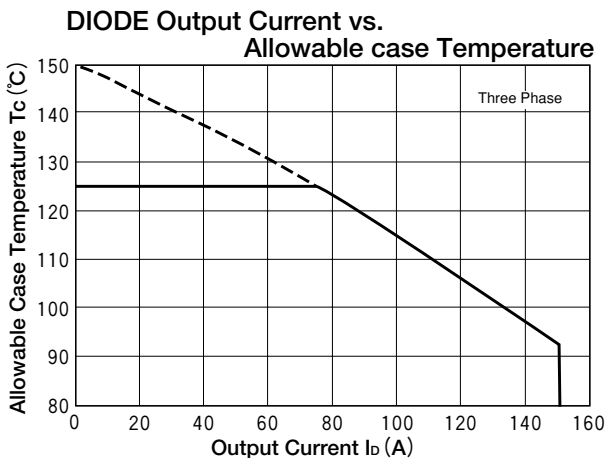


Fig.3

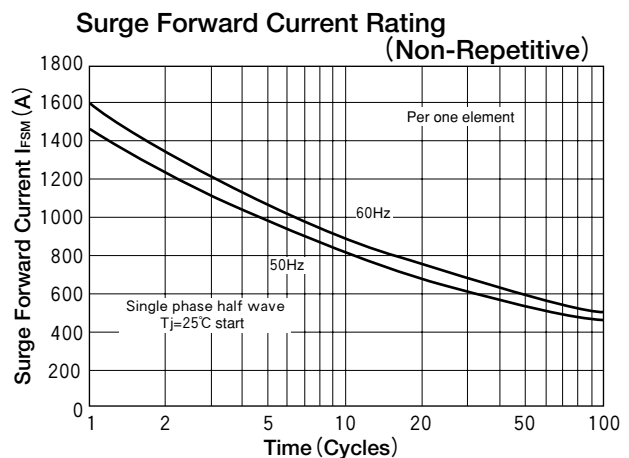


Fig.4

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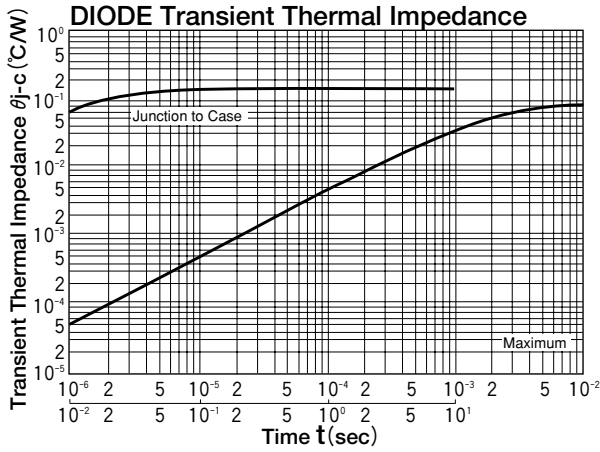


Fig.5

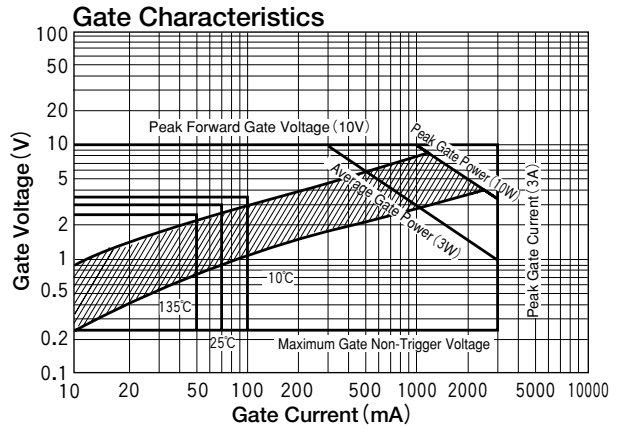


Fig.6

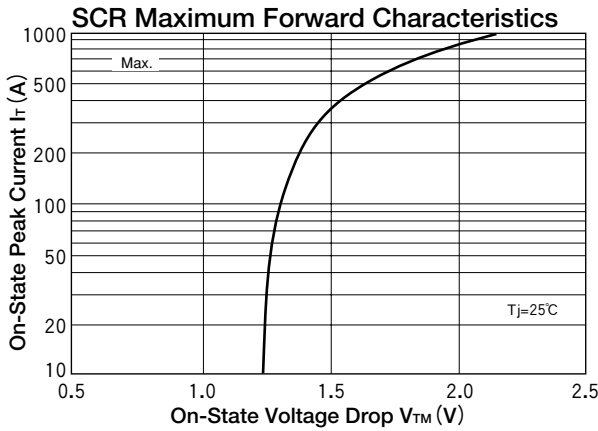


Fig.7

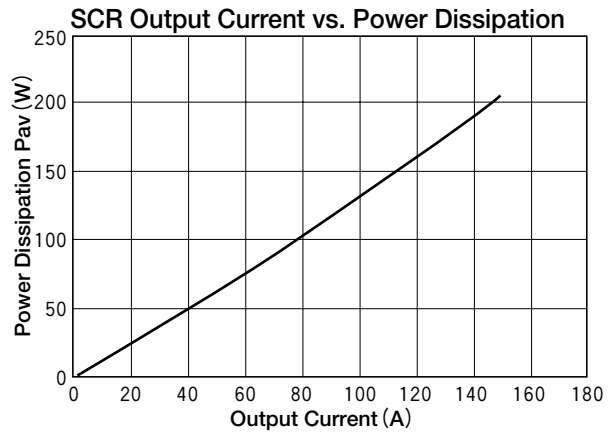


Fig.8

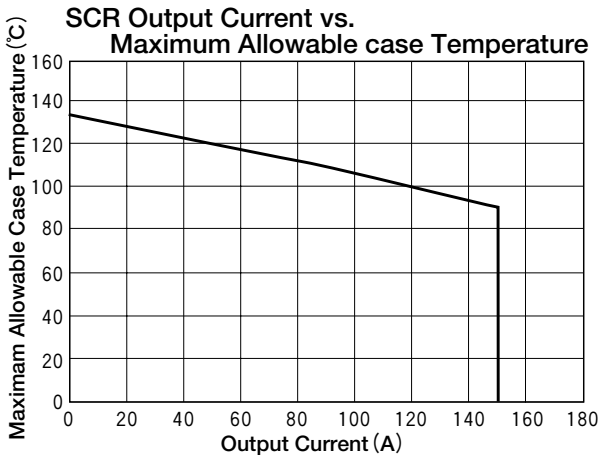


Fig.9

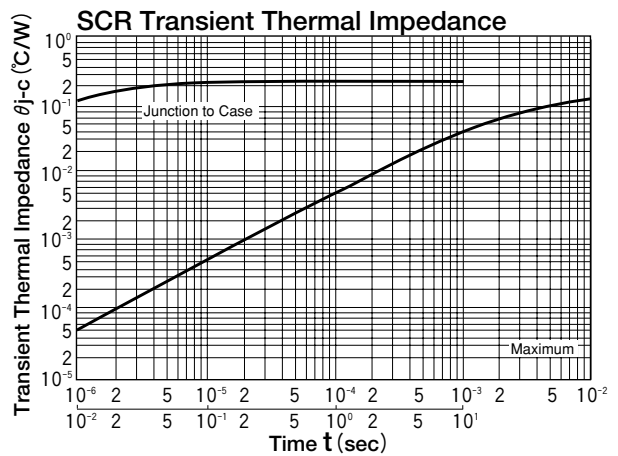
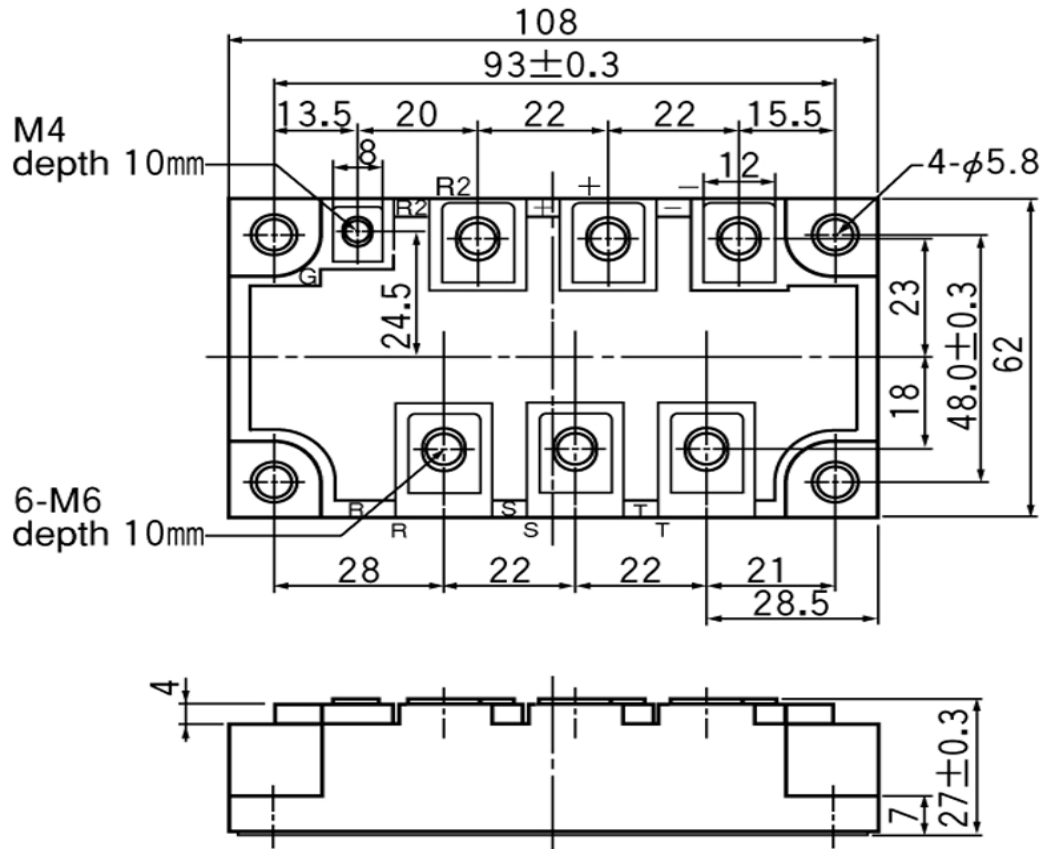


Fig.10

MDST150A

Outside Dimension



M44

