

Three Phases Rectification Bridge Modules

V_{RRM} - 1600 V

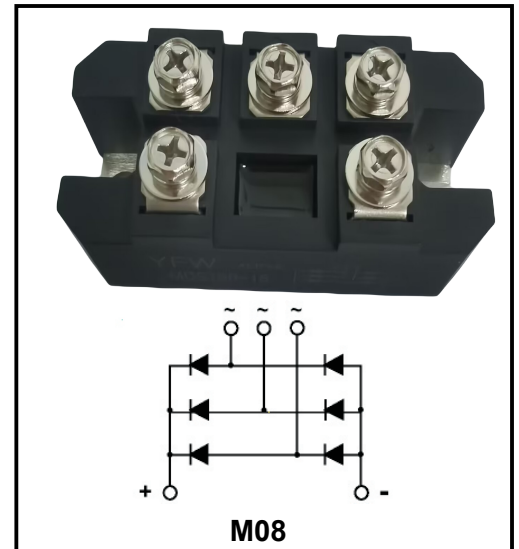
I_O - 50A

Features

- ◆ Solder joint technology with
- ◆ Increased power cycling capability
- ◆ Space and weight saving

Typical Applications

- ◆ Inverter
- ◆ Inductive heating
- ◆ Choppe



CHARACTERISTIC	TEST CONDCTIONS	SYMBOL	$T_j(^{\circ}\text{C})$	value			UNIT
				Min	Type	Max	
DC output current	Three-phase full wave rectifying circuit, $T_c=100^{\circ}\text{C}$	I_O	150			50	A
Repetitive peak reverse voltage	V_{RRM} $t_p=10\text{ms}$ $V_{RSM}=V_{DRM}$ & $V_{DRM}+200\text{V}$	V_{RRM}	150	600		1800	V
Repetitive peak current	at V_{RRM}	I_{RRM}	150			8	mA
Surge foward current	10ms half sinewave	I_{FSM}	150			0.75	KA
I^2T for fusing coordination	$V_R=0.6V_{RRM}$	I^2t				2.8	$\text{A}^2\text{s} \times 10^3$
Threshold voltage		V_{FO}	150			0.80	V
Forward slop resistance		r_F				9.0	$\text{m}\Omega$
Peak foward voltage	$I_{FM}=50\text{A}$	V_{FM}	25			1.1	V
Thermal resistance Junction to heatsink	Single side cooled	$R_{th(j-c)}$				0.55	$^{\circ}\text{C}/\text{W}$
Isolation voltage	50Hz, RM. S, $t=1\text{min}$ iso:1mA(max)	V_{iso}		2500			V
Terminal connection torque (M5)		F_m			2.0		N.m
Mounting torque (M6)					3.0		N.m
Stored temperature		T_{stg}		-40		125	$^{\circ}\text{C}$
Weight		W_t			154		g

Rating and Characteristic Curves

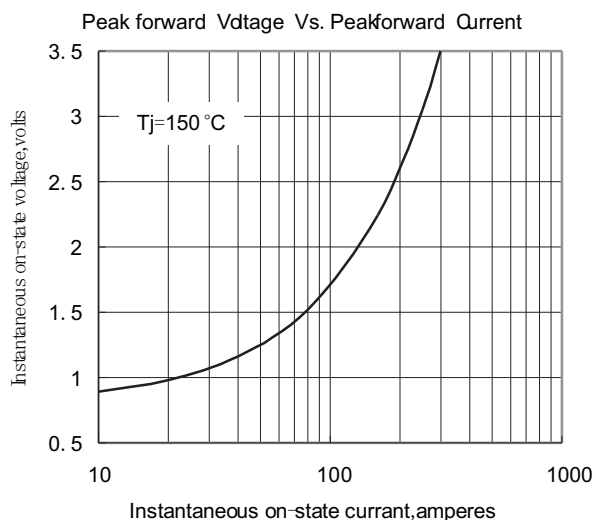


Fig. 1

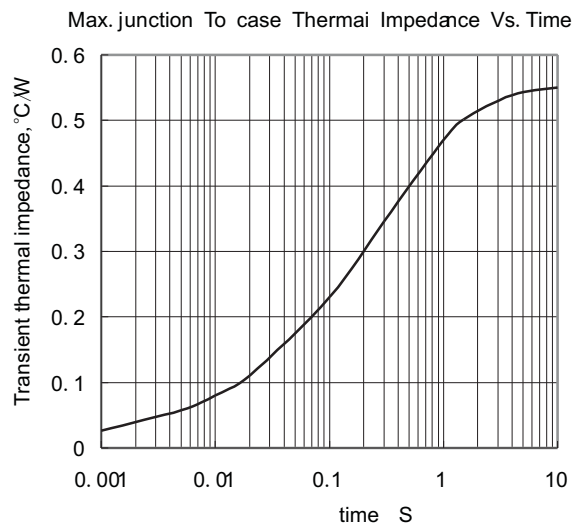


Fig. 2

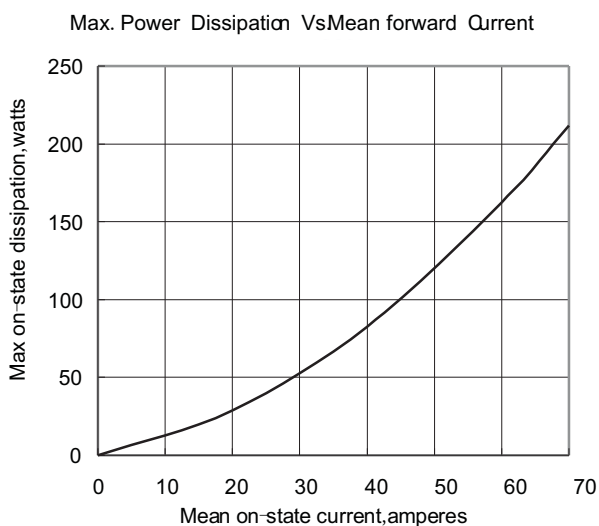


Fig. 3

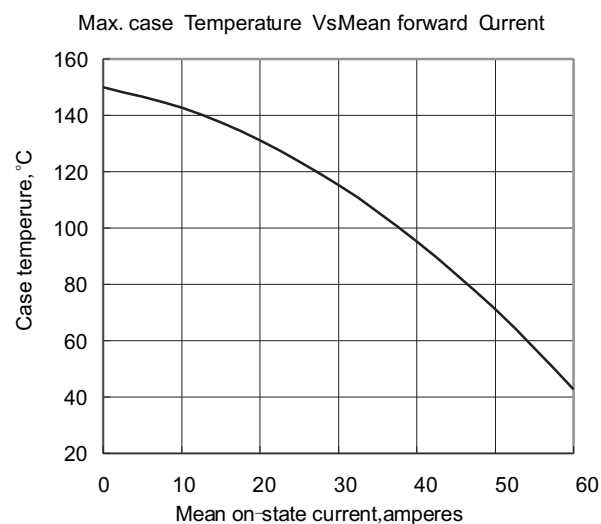


Fig. 4

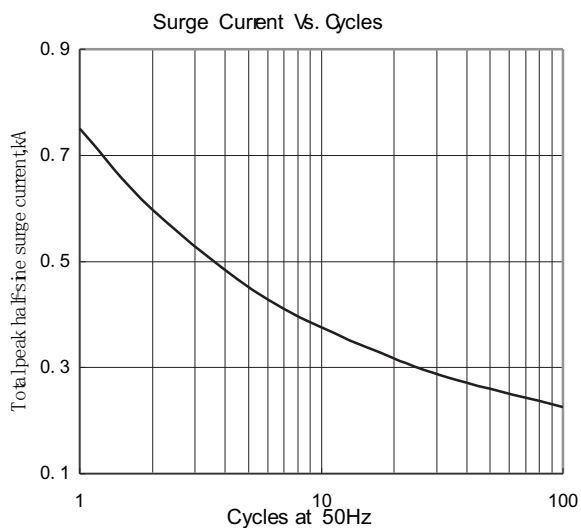


Fig. 5

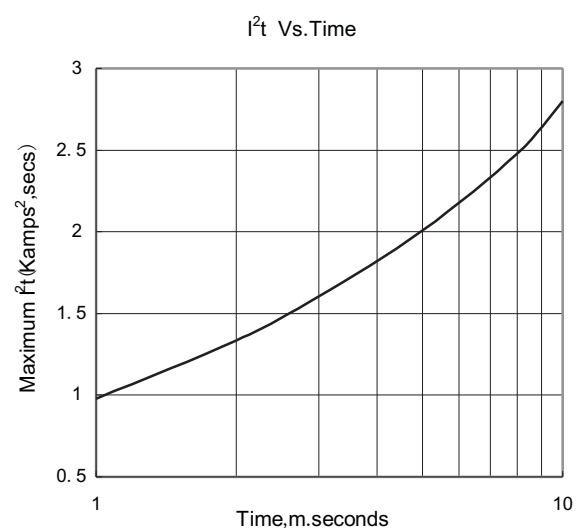
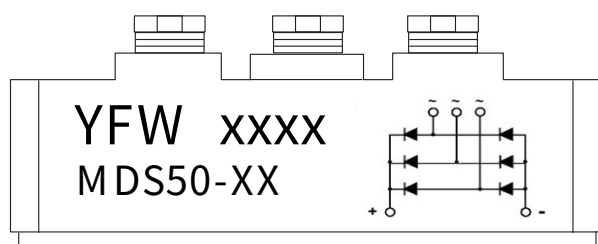


Fig. 6

Marking Diagram



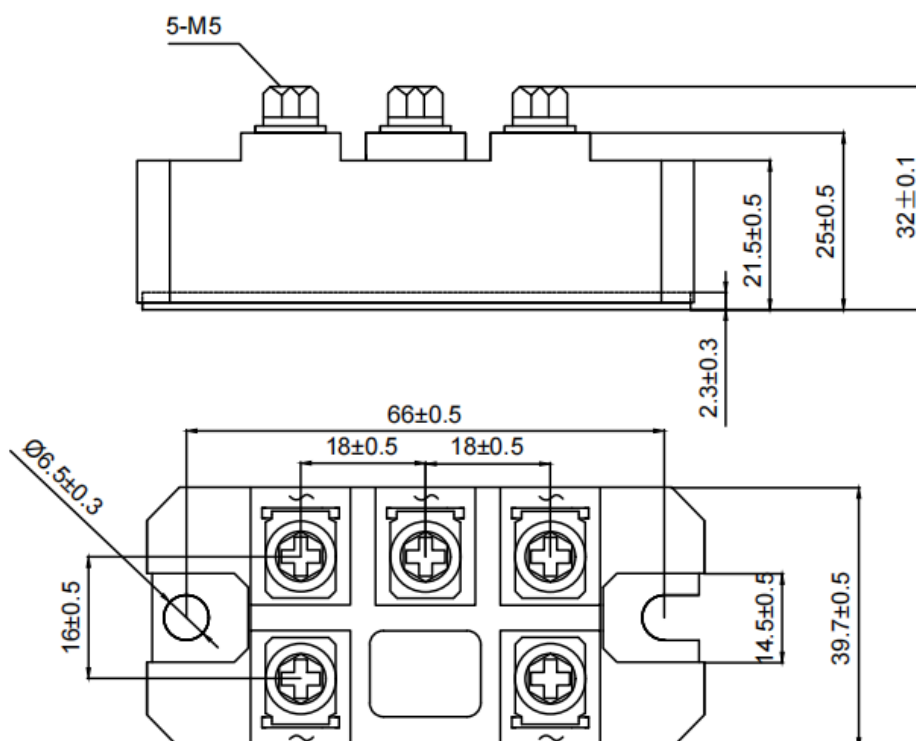
Ordering information

Model name	Package	Unit Weight	Base Quantity
MDS50-XX	M08	5.29oz(150g)	10pcs/ Box

Package Dimensions

M08

unit: Millimeter



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