

**MDS50**

High-end Power Semiconductor Manufacturer

Three Phases Rectification Bridge Modules**Features:**

- Isolated mounting base 2500V~
- Solder joint technology with
Increased power cycling capability
- Space and weight saving

Typical Applications

- Inverter
- Inductive heating
- Chopper

I_o	50 A
V_{RRM}	600-2200 V
I_{FSM}	0.40 kA
I^2t	0.8 10³A²S

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}\text{C})$	VALUE			UNIT
				Min	Type	Max	
I_o	DC output current	Three-phase full wave rectifying circuit, $T_C=100^{\circ}\text{C}$	150			50	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			8	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0$	150			0.4	kA
I^2t	I^2t for fusing coordination					0.80	10 ³ A ² s
V_{FO}	Threshold voltage		150			0.7	V
r_F	Forward slope resistance					6.0	mW
V_{FM}	Peak forward voltage	$I_{FM}=50\text{A}$	25			1.20	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled, per total				0.30	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled, per total				0.07	$^{\circ}\text{C}/\text{W}$
V_{iso}	Isolation voltage	50Hz, R.M.S, $t=1\text{min}$, $I_{iso}:1\text{mA}(\text{max})$		2500			V
F_m	Terminal connection torque(M5)			2.5		4.0	N·m
	Mounting torque(M5)			2.5		4.0	N·m
T_{vj}	Junction temperature			-40		150	$^{\circ}\text{C}$
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				135		g
Outline	T13						

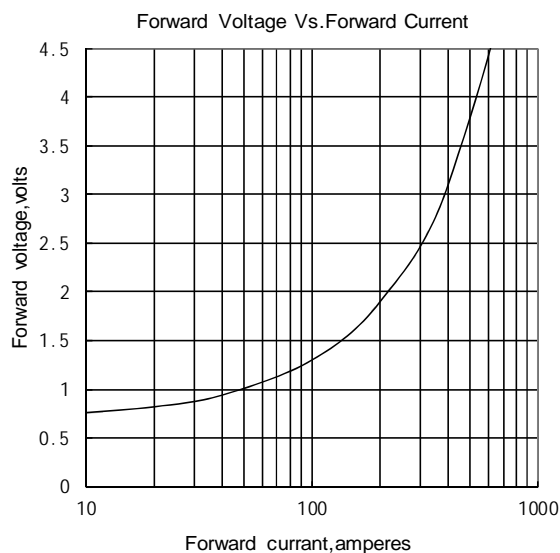


Fig.1

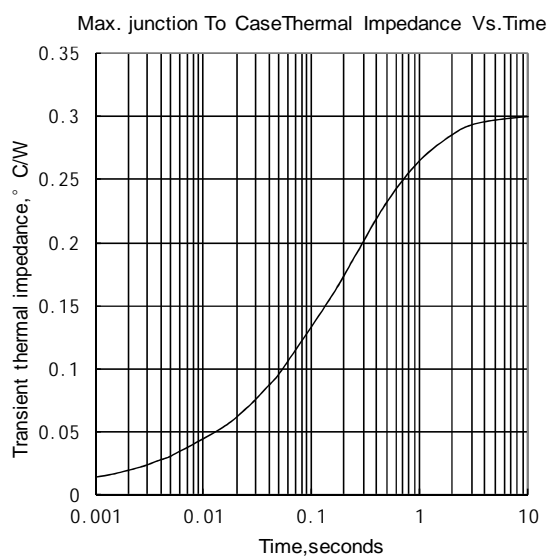


Fig.2

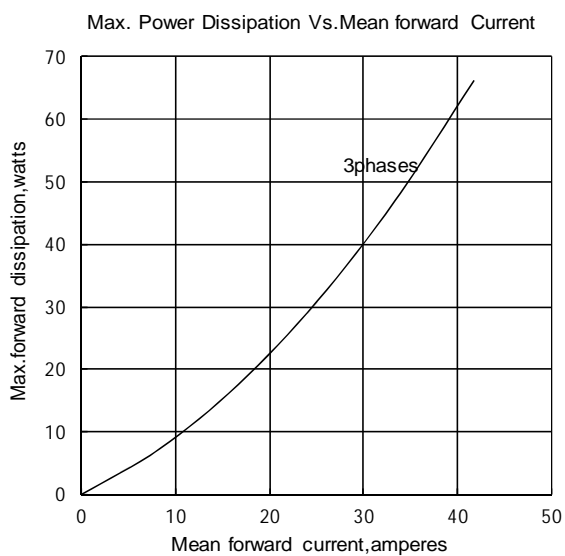


Fig.3

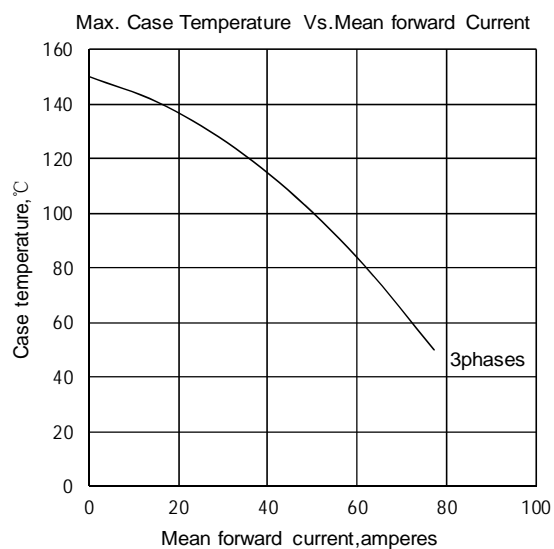


Fig.4

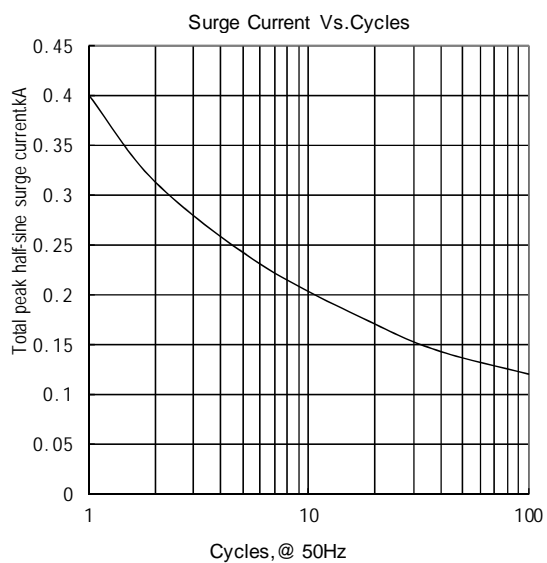


Fig.5

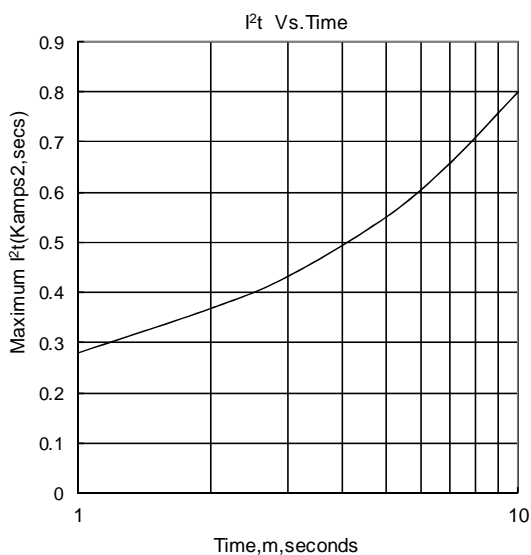
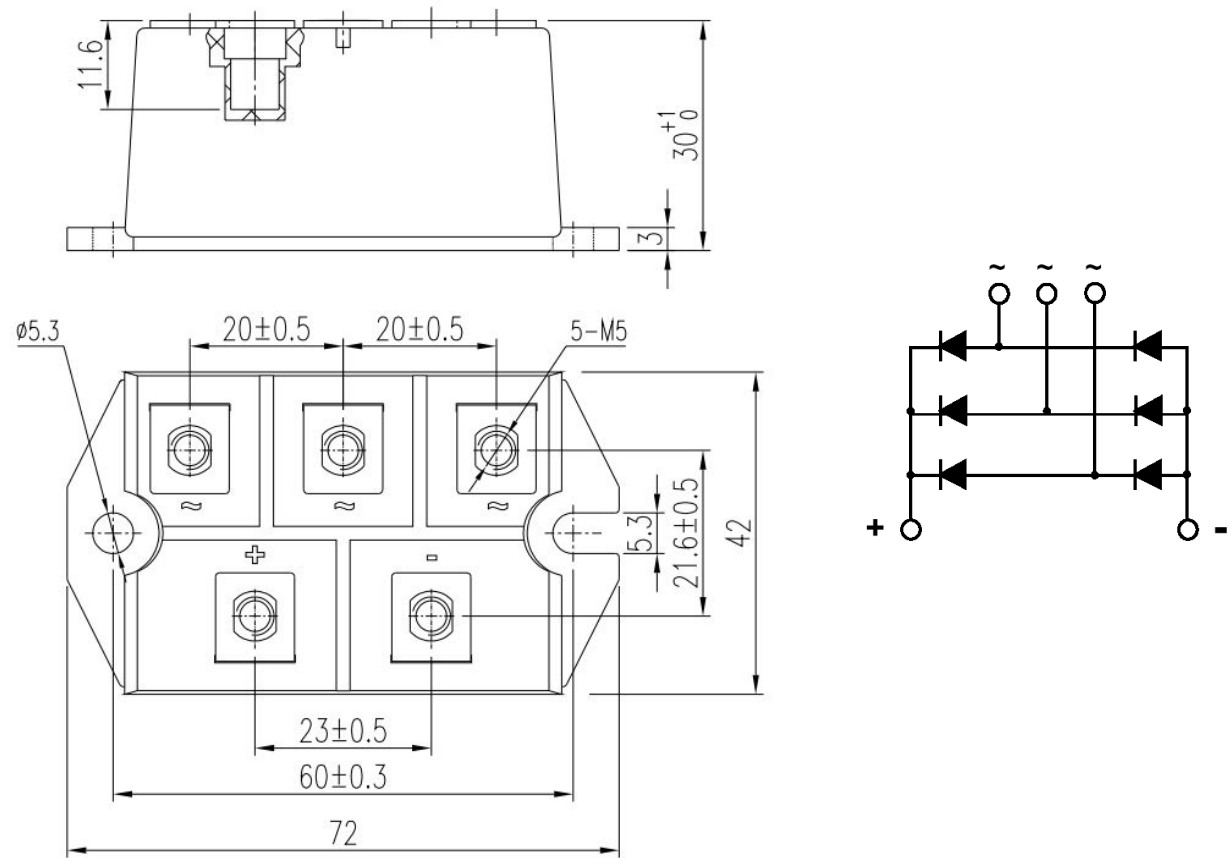


Fig.6

Outline:



Unmarked dimensional tolerance: ± 0.5 mm

T13