

**MDQ50**

High-end Power Semiconductor Manufacturer

Single Phase Rectification Bridge Modules**Features:**

- Isolated mounting base 2500V
- Solder joint technology
- Space and weight savings

Typical Applications

- DC Power supplies for equipments.
- DC supply for PWM inverter
- Inverter Welder

I_o	50 A
V_{RRM}	2200 V
I_{FSM}	0.5 KA
I^2t	$1.25 \cdot 10^3 A^2S$

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
I_o	DC output current	Single-phase full wave rectifying circuit, $T_C=100^{\circ}C$	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			0.5	kA
I^2t	I^2T for fusing coordination					1.25	$A^2s \cdot 10^3$
V_{FO}	Threshold voltage		150			0.7	V
r_F	Forward slop resistance					6.0	mW
V_{FM}	Peak forward voltage	$I_{FM}=75A$	25			1.25	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled, per total				0.24	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled, per total				0.07	$^{\circ}C/W$
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min, $I_{iso}:1mA(max)$		2500			V
F_m	Terminal connection torque(M5)				4.0		N·m
	Mounting torque(M5)				4.0		N·m
T_{vj}	Junction temperature			-40		150	$^{\circ}C$
T_{stg}	Stored temperature			-40		125	$^{\circ}C$
W_t	Weight				120		g
Outline	T12						

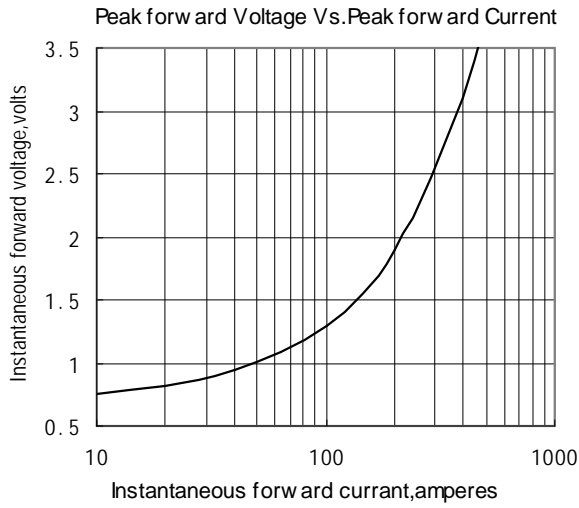


Fig.1

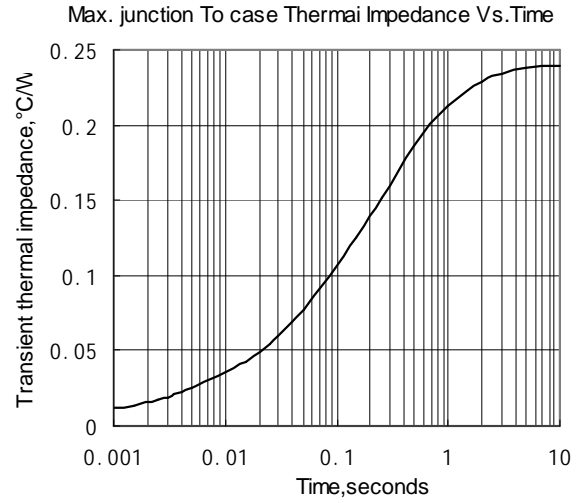


Fig.2

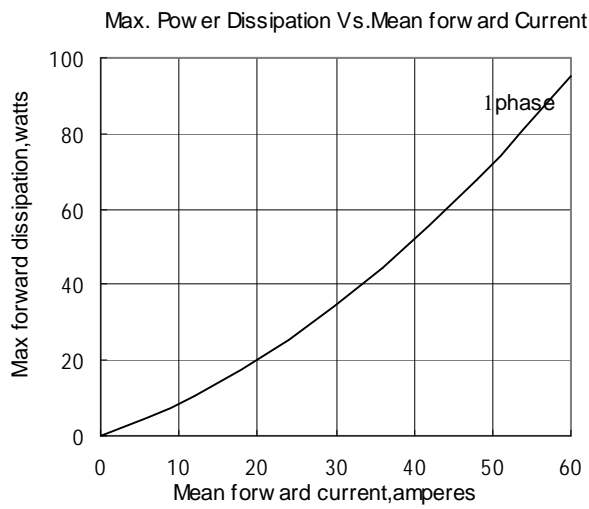


Fig.3

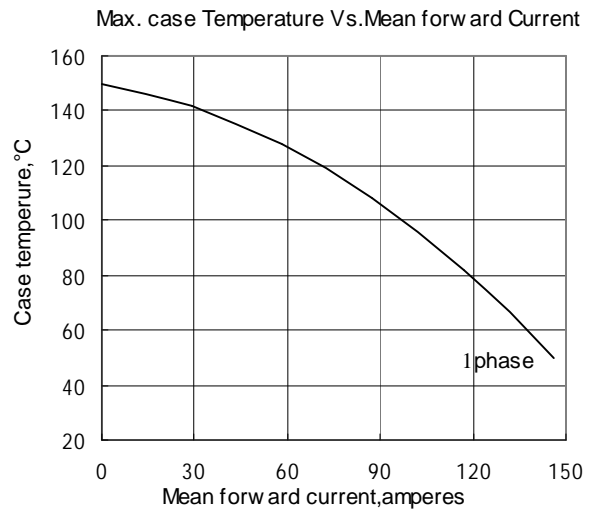


Fig.4

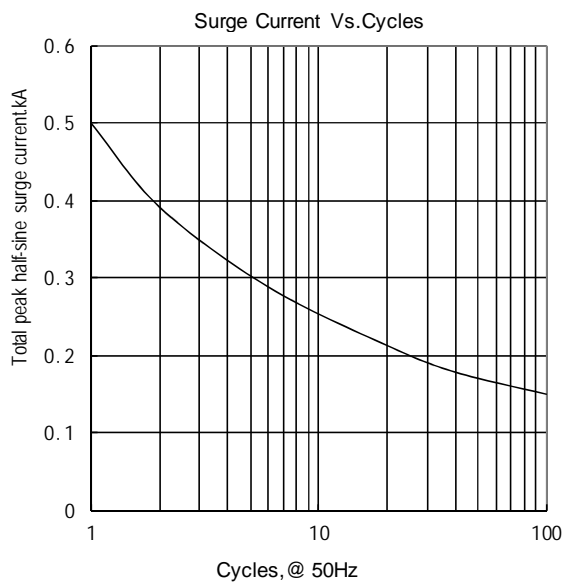


Fig.5

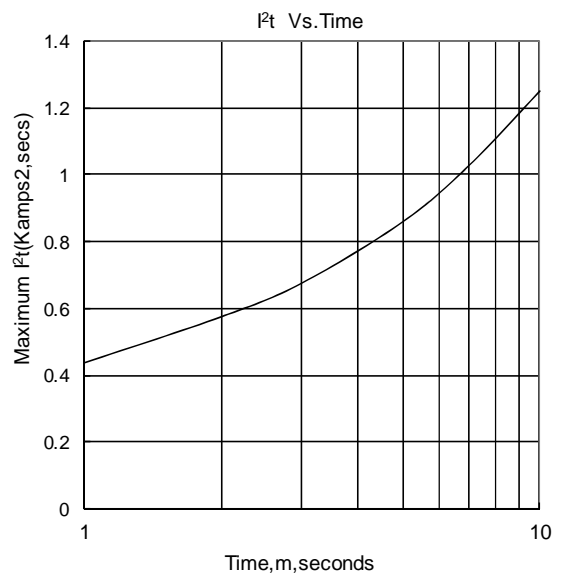
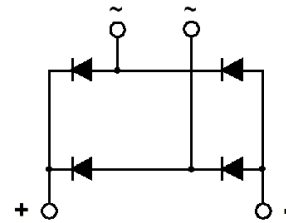
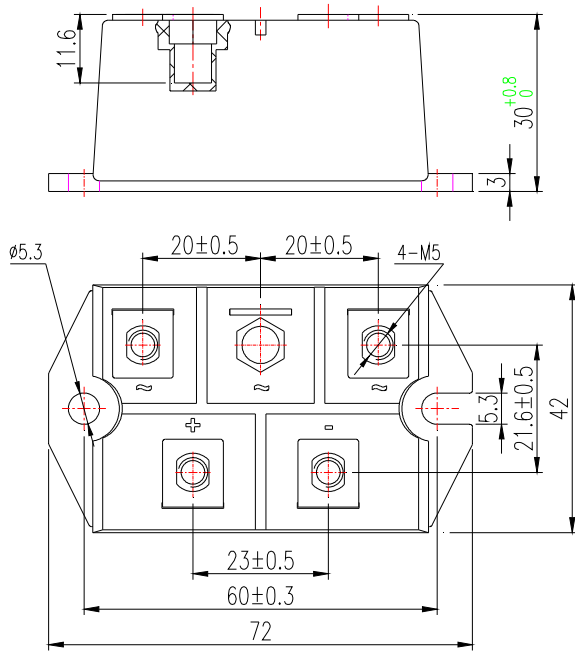


Fig.6

Outline:



T12