

FEATURES

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

TYPICAL APPLICATIONS

- Welding Inverter
- Power Supplies

TECHNICAL DATA

DEVICE TYPE	V_{RRM} (V)	V_{RSM} (V)
MDQ100/04	400	500
MDQ100/16	1600	1700



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}\text{C})$	VALUE			UNIT
				Min	Type	Max	
I_O	DC output current	Single-phase full wave rectifying circuit, $T_C=100^{\circ}\text{C}$	150			100	A
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms $V_{RSM}=V_{RRM}+100\text{V}$	150	600		1800	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			10	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$	150			1.50	KA
I^2t	I^2t for fusing coordination					11.4	$\text{A}^2\text{s}\cdot 10^3$
V_{FO}	Threshold voltage		150			0.80	V
r_F	Forward slop resistance					4.5	$\text{m}\Omega$
V_{FM}	Peak forward voltage	$I_{FM}=150\text{A}$	25			1.20	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.14	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.07	$^{\circ}\text{C}/\text{W}$
V_{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I_{iso} : 1mA(max)		2500			V
F_m	Terminal connection torque(M6)				6		N·m
	Mounting torque(M5)				4		N·m
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				420		g

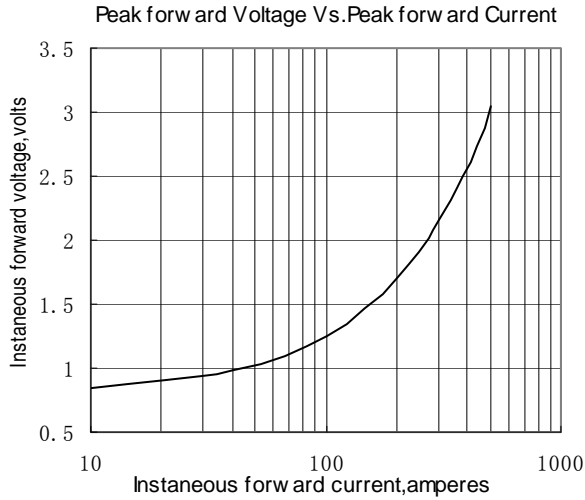


Fig.1

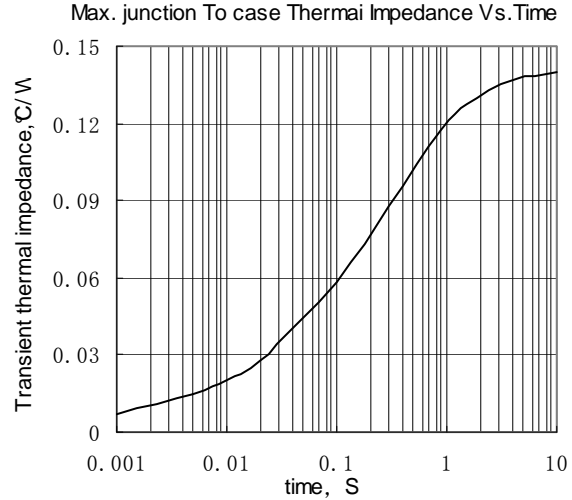


Fig.2

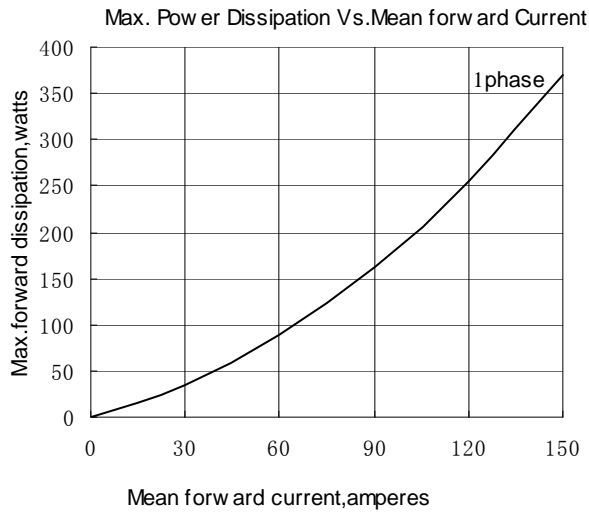


Fig.3

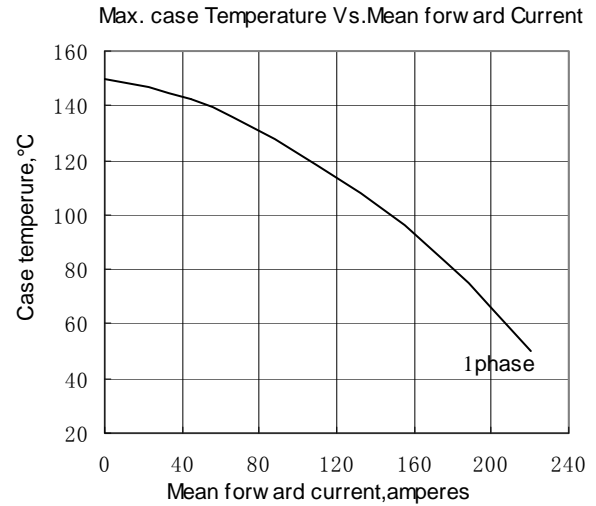


Fig.4

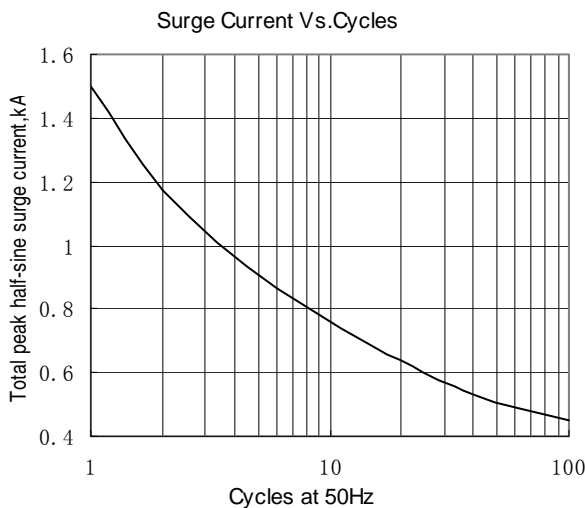


Fig.5

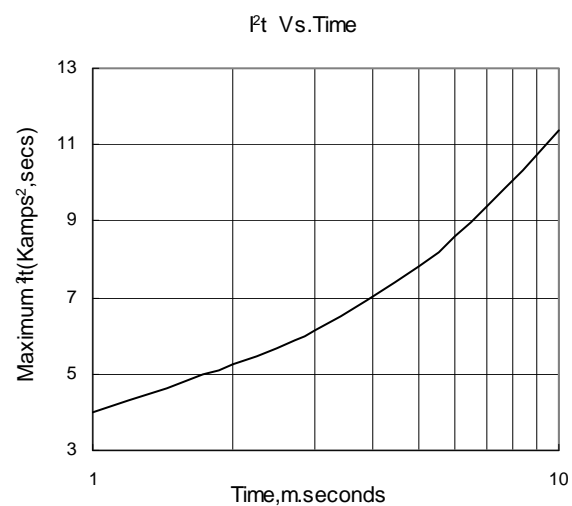
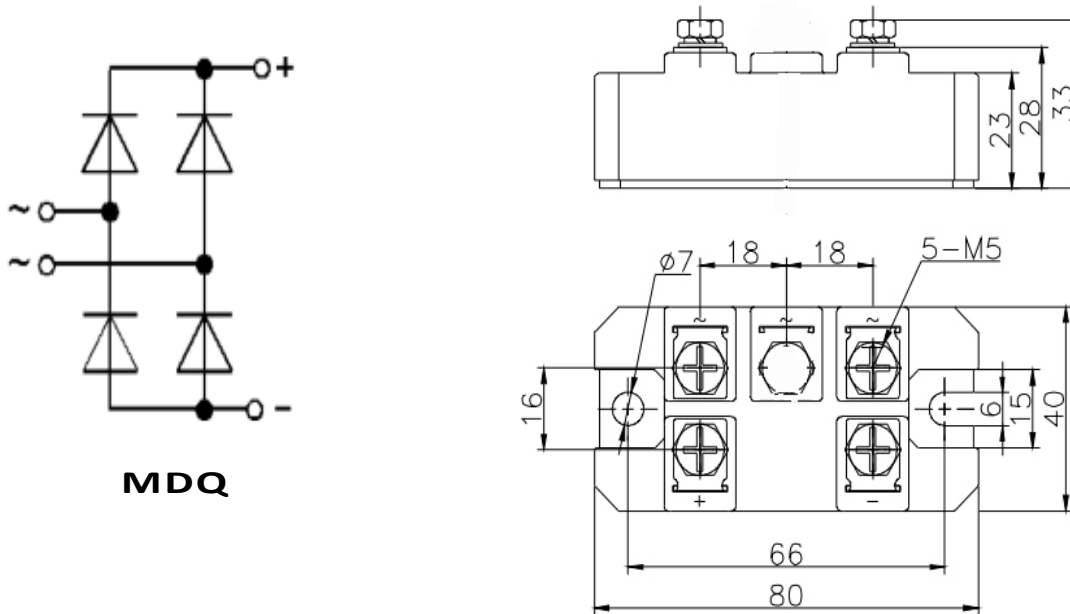


Fig.6

PACKAGE OUTLINE



All dimensions are in mm.

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