

FEATURES

- Isolated mounting base 2500V-
- Pressure contact technology with Increased power cycling capability
- Space and weight savings
- Welding

TYPICAL APPLICATIONS

- Inverter
- Inductive heating
- Chopper

TECHNICAL DATA

DEVICE TYPE	V_{RRM} (V)	V_{RSM} (V)
MDS100/04	400	500
MDS100/16	1600	1700



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			100	A
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms $V_{RSM} = V_{RRM} + 200\text{V}$	150	600		1600	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			8	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			1.2	KA
I^2t	I^2T for fusing coordination	$V_R=0.6V_{RRM}$	150			7.2	$\text{A}^2\text{s} \times 10^{-3}$
V_{FO}	Threshold voltage		150			0.8	V
r_F	Forward slop resistance					4.5	m Ω
V_{FM}	Peak forward voltage	$I_{FM}=100\text{A}$	25			1.3	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.2	$^{\circ}\text{C} / \text{W}$
$R_{th(c-h)}$	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(M5)				4		N·m
	Mounting torque(M6)				6		N·m
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				200		g
Outline	IR- 5						

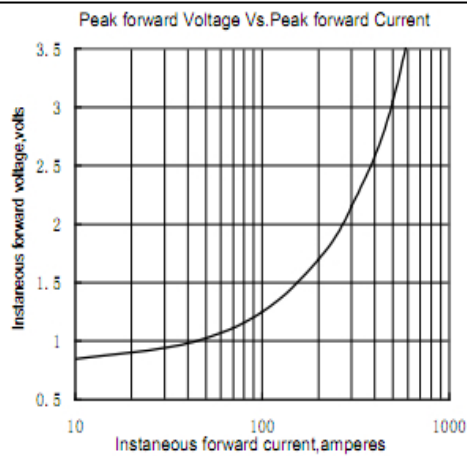


Fig.1

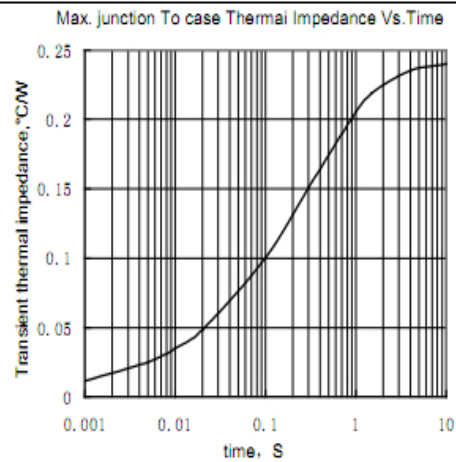


Fig.2

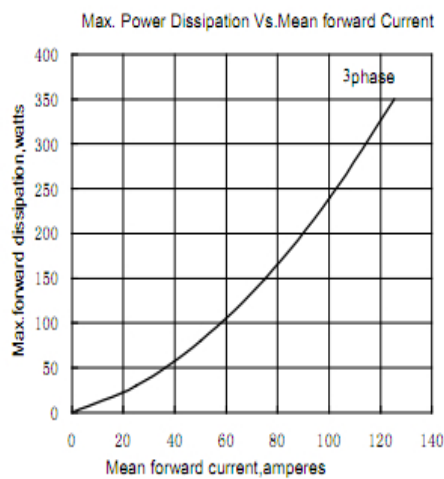


Fig.3

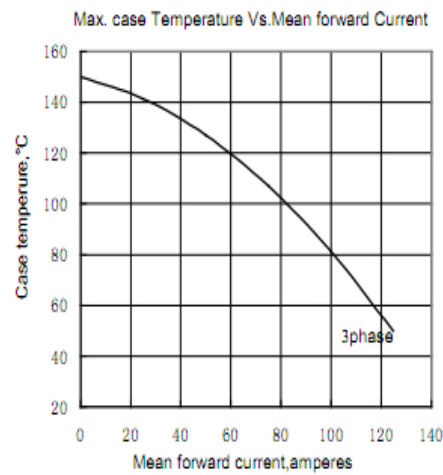


Fig.4

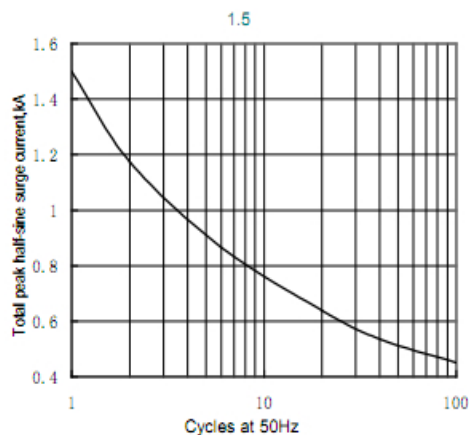


Fig.5

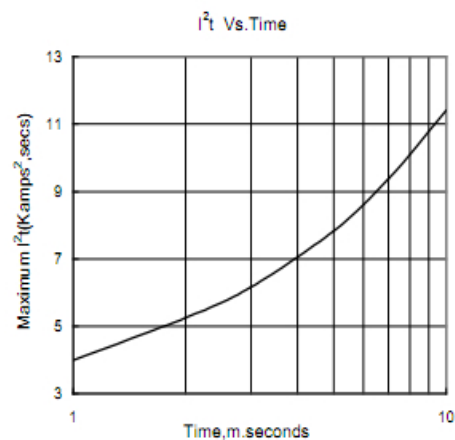
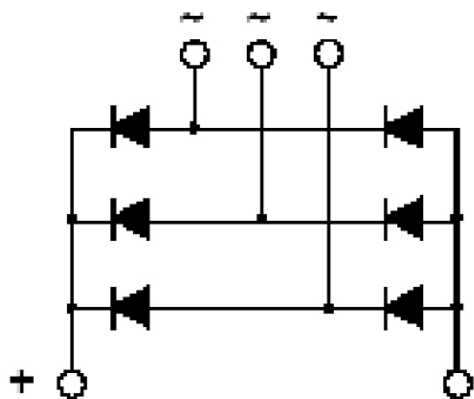
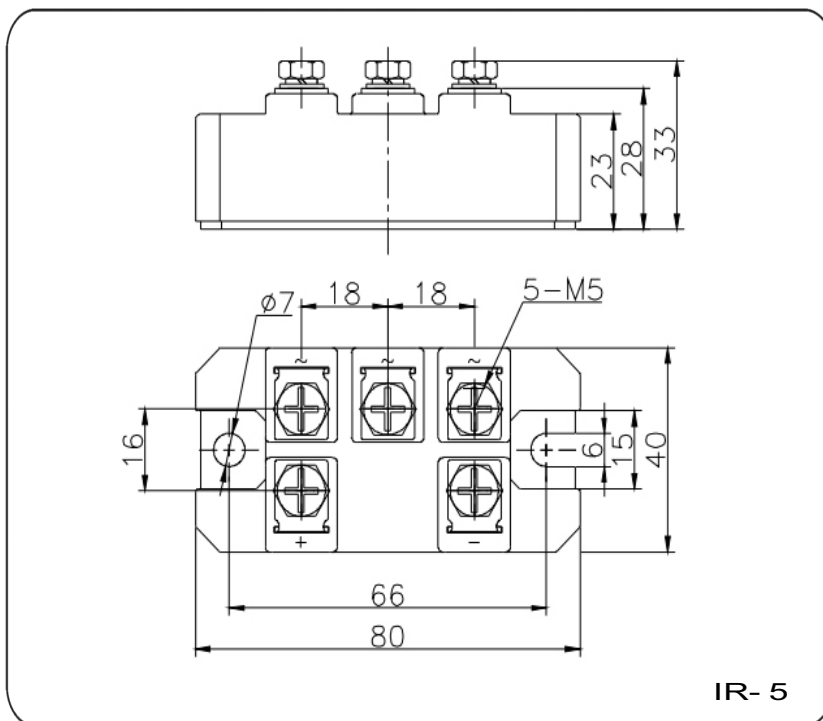


Fig.6

CIRCUIT DIAGRAM



PACKAGE OUTLINE



All dimensions are in mm.

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