

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)
MDS150/04	400	500
MDS150/16	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			150	A
V_{RRM}	Repetitive peak reverse voltage	$V_{RRM} t_p=10\text{ms}$ $V_{RSM} = V_{RRM}+200\text{V}$	150	600		1600	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			10	mA
I_{FSM}	Surge forward current	10ms half sine wave	150			1.5	KA
I^2t	I^2t for fusing coordination	$V_A=0.6V_{RRM}$				1.14	$\text{A}^2\text{s}\cdot 10^3$
V_{FO}	Threshold voltage		150			0.8	V
r_F	Forward slop resistance					3.8	m Ω
V_{FM}	Peak forward voltage	$I_{FM}=150\text{A}$	25			1.20	V
$R_{\theta(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.14	$^{\circ}\text{C}/\text{W}$
$R_{\theta(c-h)}$	Thermal resistance case to heat sink	Single side cooled				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 (M64)				6		N·m
	Mounting torque (M5)				4		N·m
T_{sig}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				450		g
Outline	IR- 5						

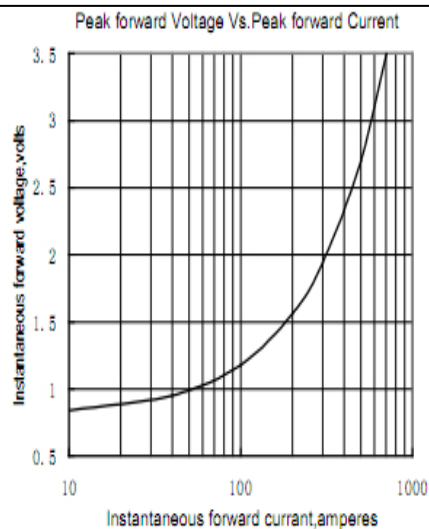


Fig. 1

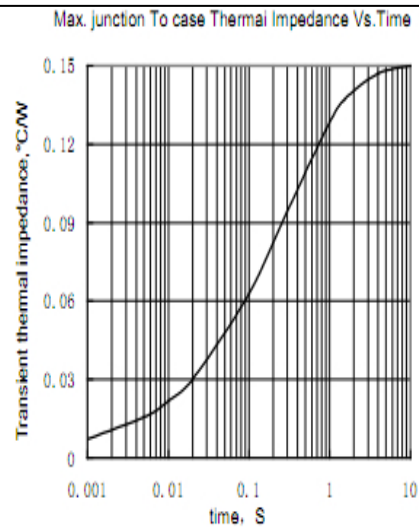


Fig. 2

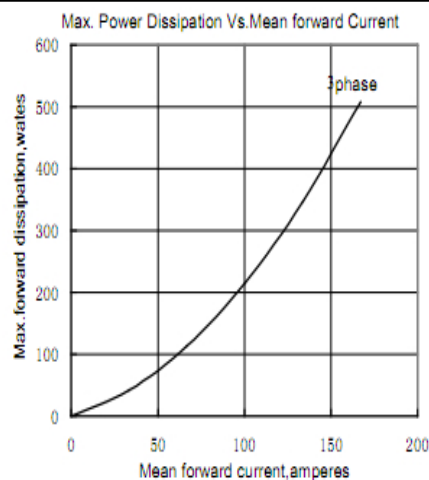


Fig. 3

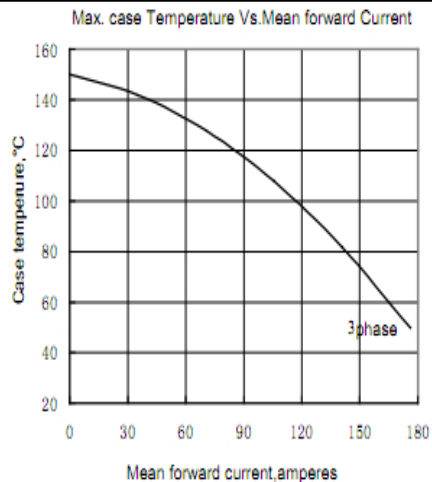


Fig. 4

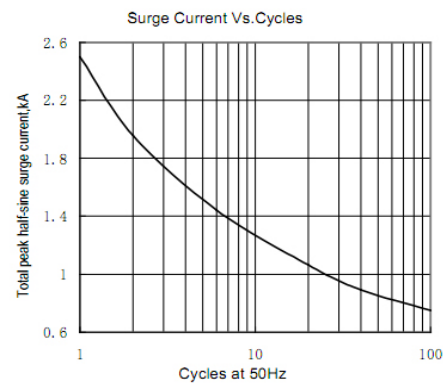


Fig. 5

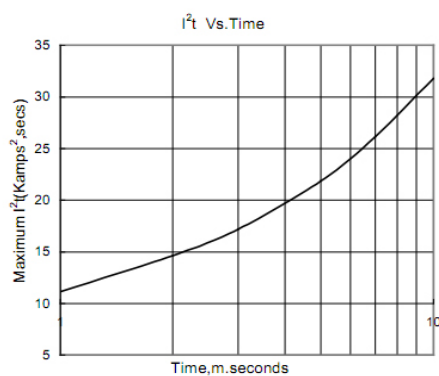
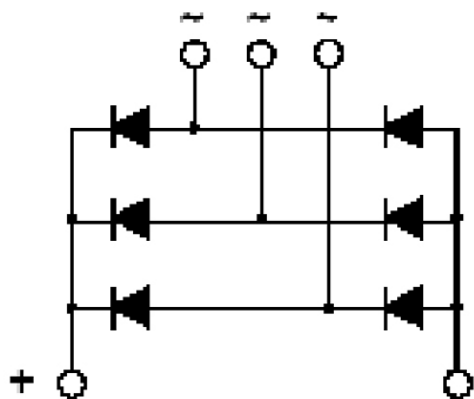
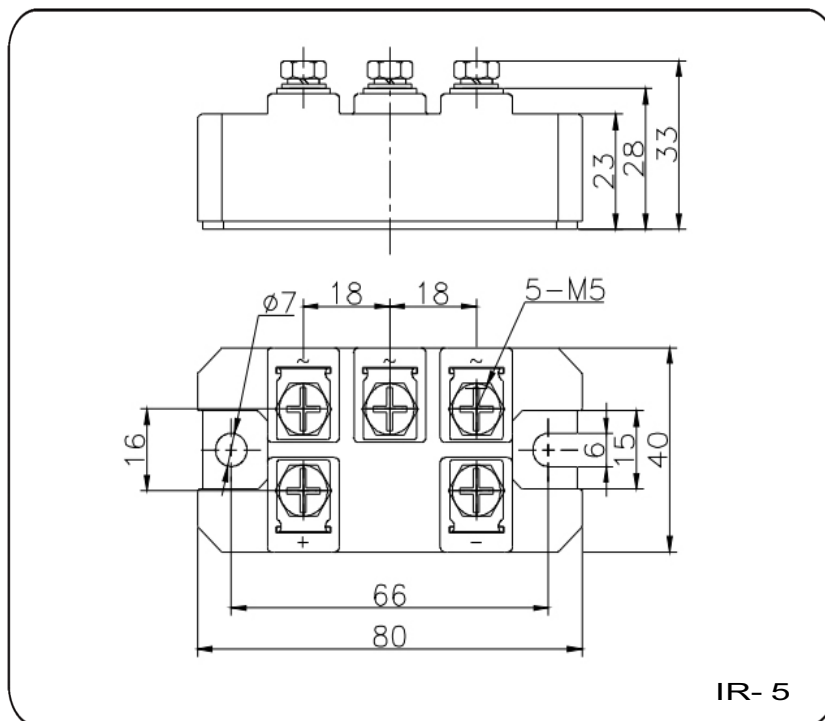


Fig. 6

CIRCUIT DIAGRAM



PACKAGE OUTLINE



All dimensions are in mm.

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