

**Features:**

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

**Typical Applications:**

- n Inverter
- n Inductive heating
- n Chopper

$V_{RRM}$	Type & Outline
600V	MDS150-06-234H5
800V	MDS150-08-234H5
1000V	MDS150-10-234H5
1200V	MDS150-12-234H5
1400V	MDS150-14-234H5
1600V	MDS150-16-234H5
1800V	MDS150-18-234H5

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
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	150			12	mA
$I_{FSM}$	Surge forward current	10ms half sine wave	150			1.3	kA
$I^2t$	$I^2t$ for fusing coordination	$V_R=0$				8.45	$10^3\text{A}^2\text{s}$
$I_{FSM}$	Surge forward current	10ms half sine wave	45			1.7	kA
$I^2t$	$I^2t$ for fusing coordination	$V_R=0$				14.45	$10^3\text{A}^2\text{s}$
$V_{FO}$	Threshold voltage		150			0.75	V
$r_F$	Forward slope resistance					2.4	mW
$V_{FM}$	Peak forward voltage	$I_{FM}=150\text{A}$	25			1.40	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled, per total				0.14	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	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(M6)			4.5		6.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
$T_{vj}$	Junction temperature			-40		150	$^{\circ}\text{C}$
$T_{stg}$	Stored temperature			-40		125	$^{\circ}\text{C}$
$W_t$	Weight				240		g
Outline	234H5						

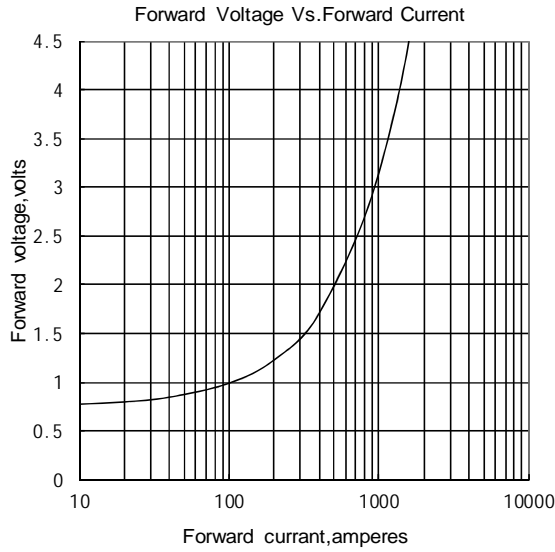


Fig.1

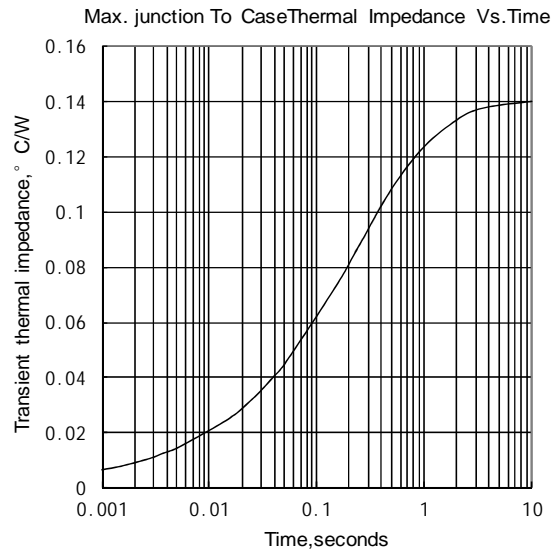


Fig.2

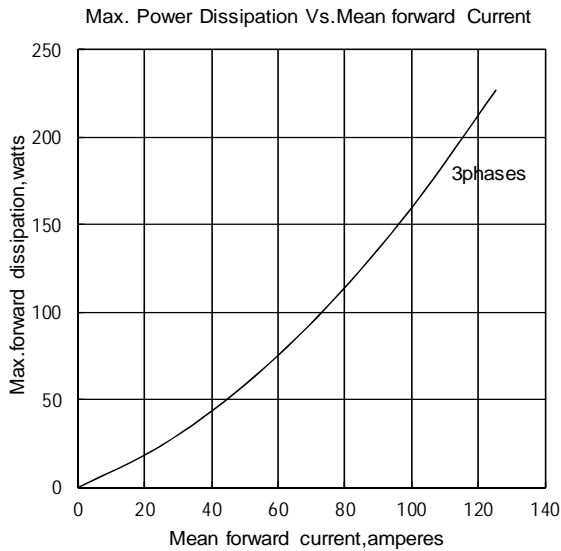


Fig.3

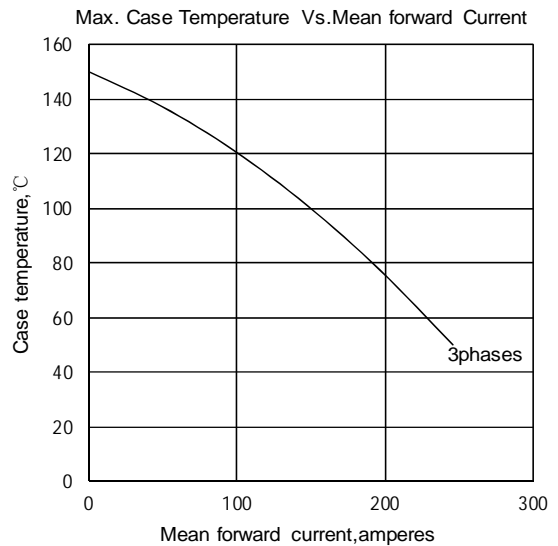


Fig.4

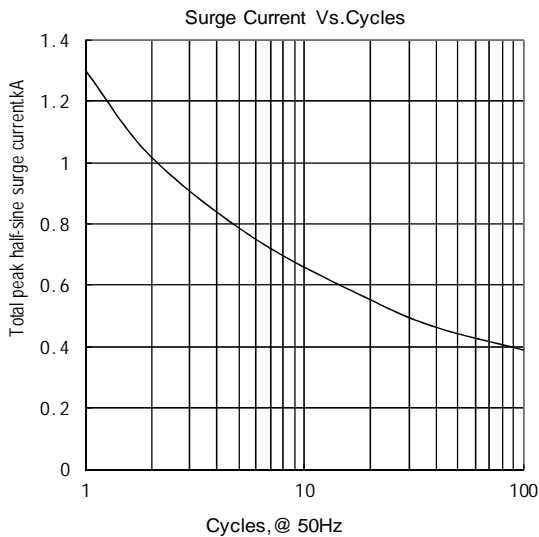


Fig.5

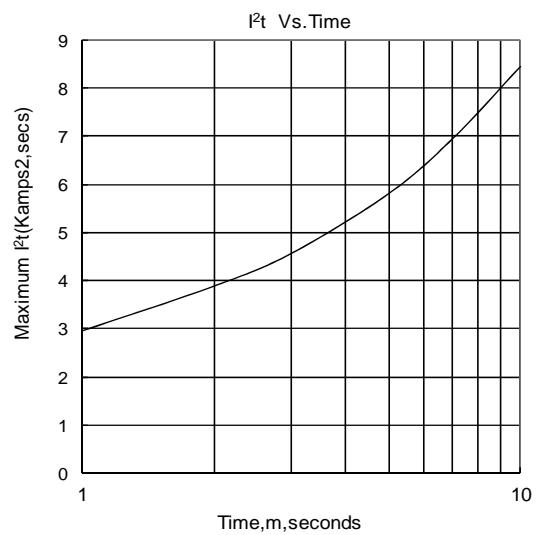
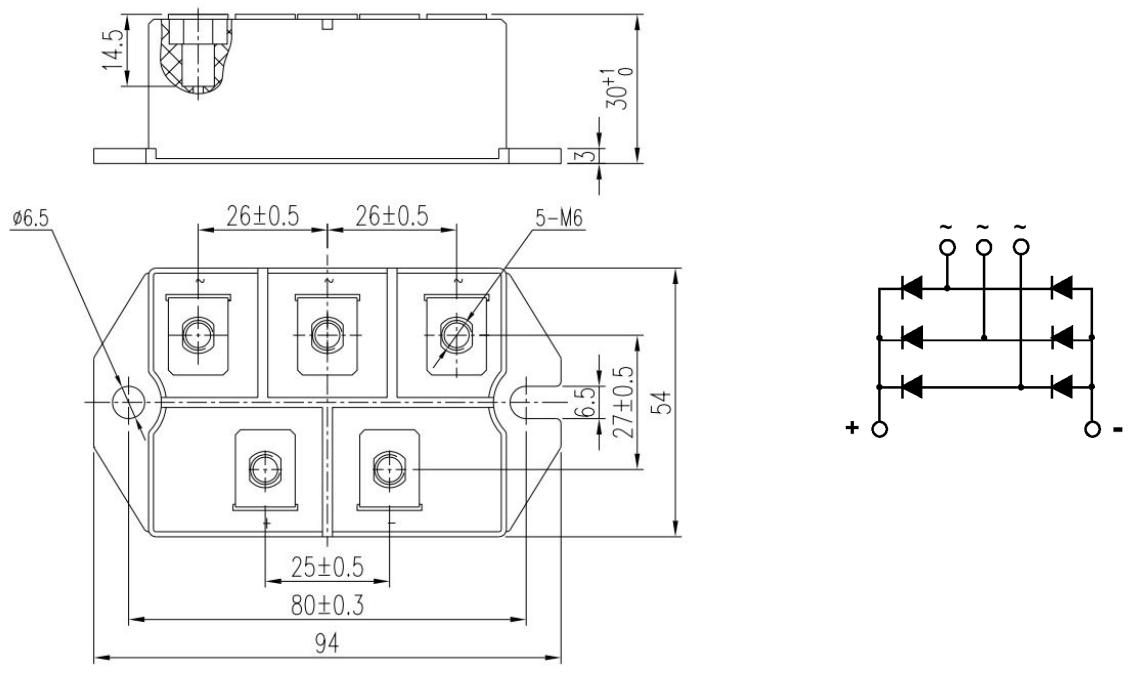


Fig.6

Outline:



Unmarked dimensional tolerance: ±0.5mm