

**Features:**

- Isolated mounting base 3000V~
- Solder joint technology with Increased power cycling capability
- Space and weight saving

**Typical Applications**

- Inverter
- Inductive heating
- Chopper

$V_{RRM}$	Type & Outline
2000V	MDS100-20-232H5
2200V	MDS100-22-232H5

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j$ (°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
$I_{RRM}$	Repetitive peak current	at $V_{RRM}$	150			8	mA
$I_{FSM}$	Surge forward current		45 125 150			0.75 0.70 0.58	kA
$I^2t$	$I^2t$ for fusing coordination	10ms half sine wave, $V_R=0$	45 125 150			2.81 2.45 1.68	$10^3\text{A}^2\text{s}$
$V_{FO}$	Threshold voltage		150			0.72	V
$r_F$	Forward slope resistance					7.00	mW
$V_{FM}$	Peak forward voltage	$I_{FM}=100\text{A}$	25			1.40	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled, per total				0.20	°C /W
$R_{th(c-h)}$	Thermal resistance case to heat sink	Single side cooled, per total				0.07	°C /W
$V_{iso}$	Isolation voltage	50Hz, R.M.S, $t=1\text{min}$ , $I_{iso}:1\text{mA(max)}$		3000			V
$F_m$	Terminal connection torque(M5)			2.5		4.0	N·m
	Mounting torque(M5)			2.5		4.0	N·m
$T_{vj}$	Junction temperature			-40		150	°C
$T_{stg}$	Stored temperature			-40		125	°C
$W_t$	Weight				135		g
Outline				232H5			

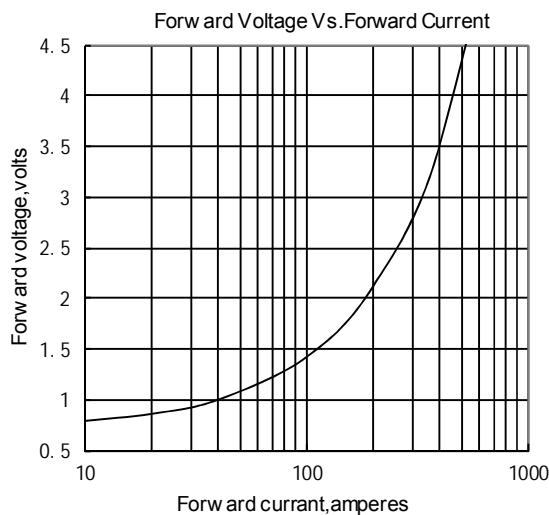


Fig.1

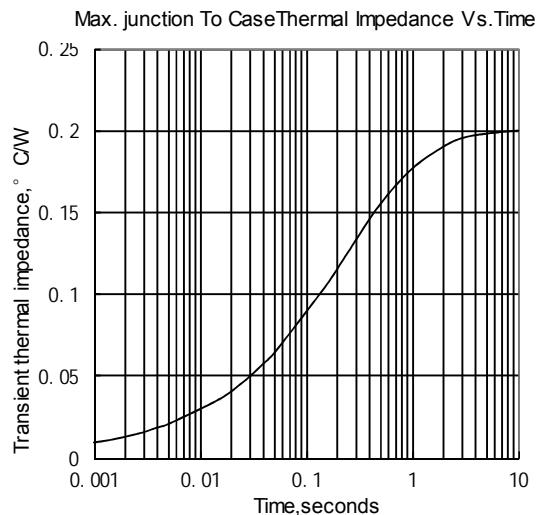


Fig.2

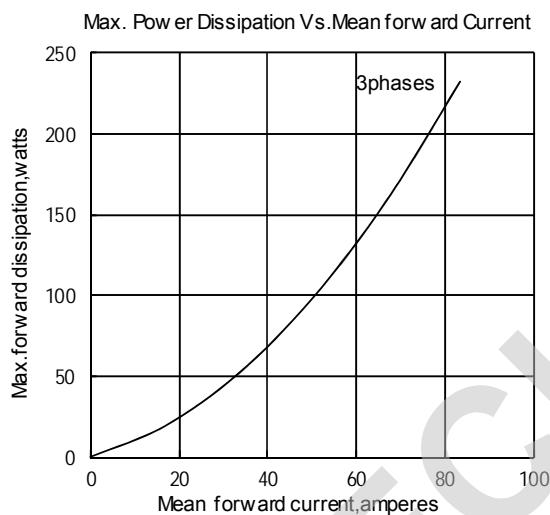


Fig.3

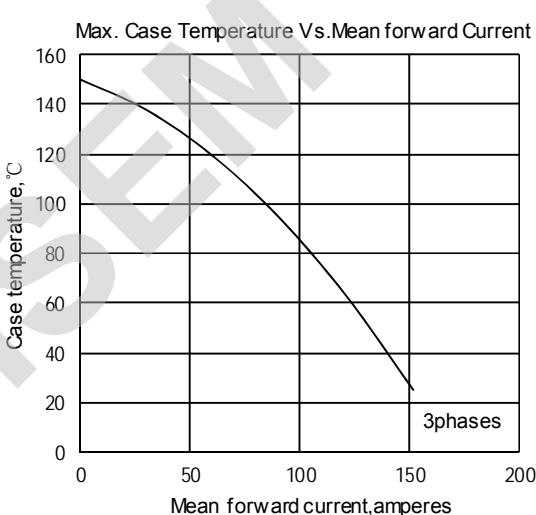


Fig.4

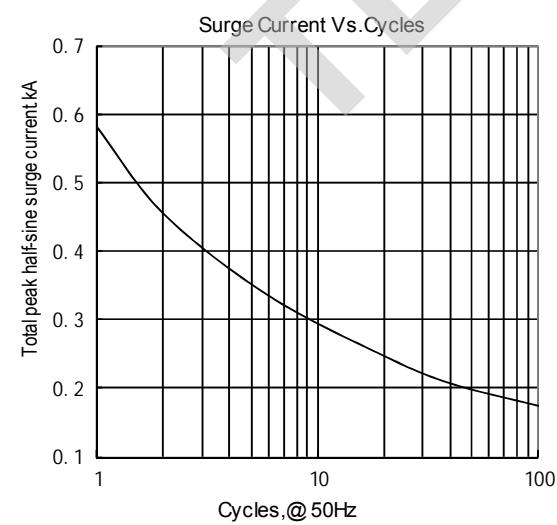


Fig.5

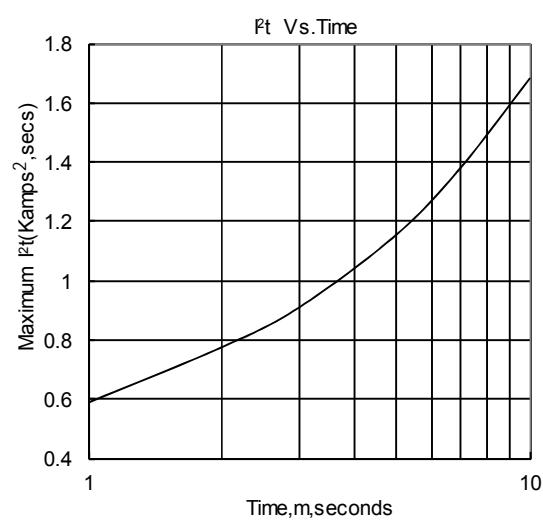
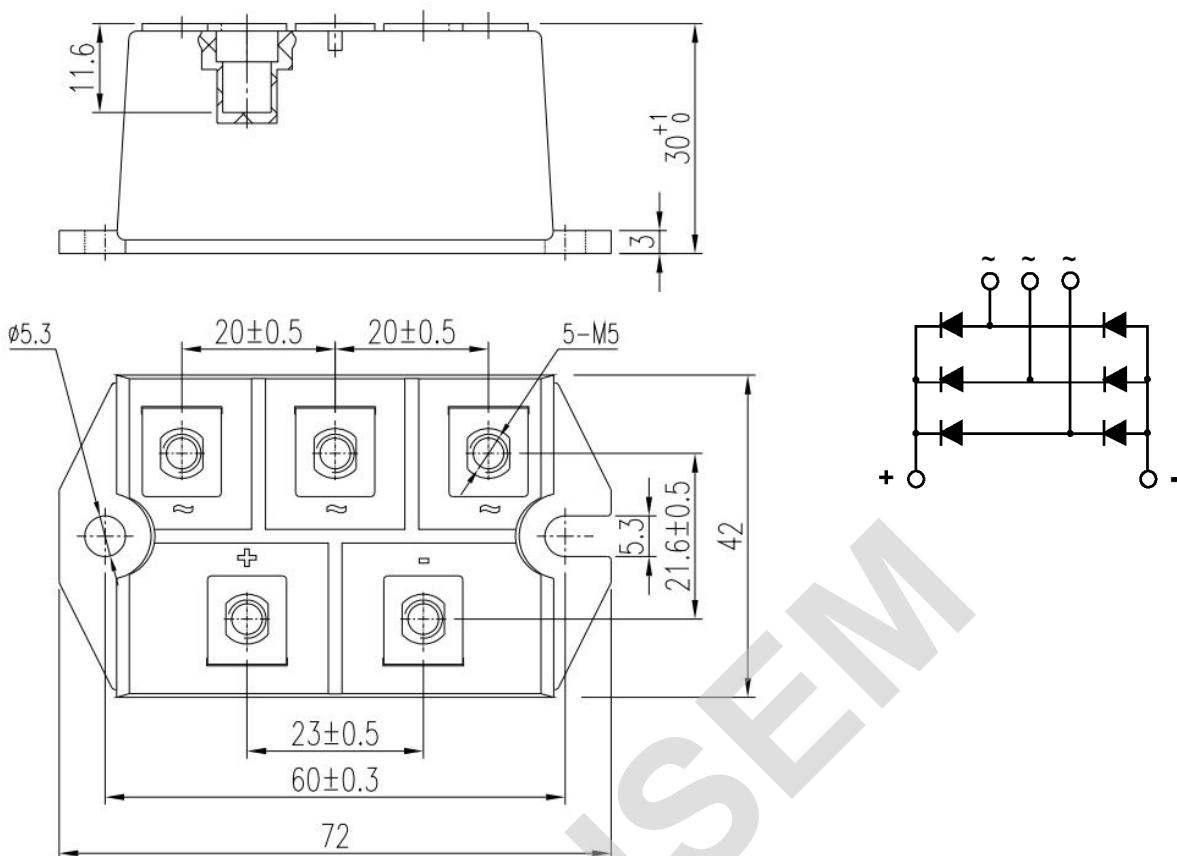


Fig.6

**Outline:**

Unmarked dimensional tolerance: ±0.5mm

TECHSEM reserves the right to change specifications without notice.