



**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 <sub>RRM</sub>	Type & Outline
800V	MDS100-08-232H5
1000V	MDS100-10-232H5
1200V	MDS100-12-232H5
1400V	MDS100-14-232H5
1600V	MDS100-16-232H5
1800V	MDS100-18-232H5

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>j</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>O</sub>	DC output current	Three-phase full wave rectifying circuit, T <sub>C</sub> =100°C	150			100	A
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	150			8	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave V <sub>R</sub> =0	150			0.6	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination					1.8	10 <sup>3</sup> A <sup>2</sup> s
V <sub>FO</sub>	Threshold voltage		150			0.7	V
r <sub>F</sub>	Forward slope resistance					4.5	mW
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =100A	25			1.30	V
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	Single side cooled, per total				0.20	°C/W
R <sub>th(c-h)</sub>	Thermal resistance case to heatsink	Single side cooled, per total				0.07	°C/W
V <sub>iso</sub>	Isolation voltage	50Hz, R.M.S, t=1min, I <sub>iso</sub> :1mA(max)		2500			V
F <sub>m</sub>	Terminal connection torque(M5)			2.5		4.0	N·m
	Mounting torque(M5)			2.5		4.0	N·m
T <sub>vj</sub>	Junction temperature			-40		150	°C
T <sub>stg</sub>	Stored temperature			-40		125	°C
W <sub>t</sub>	Weight				135		g
Outline	232H5						

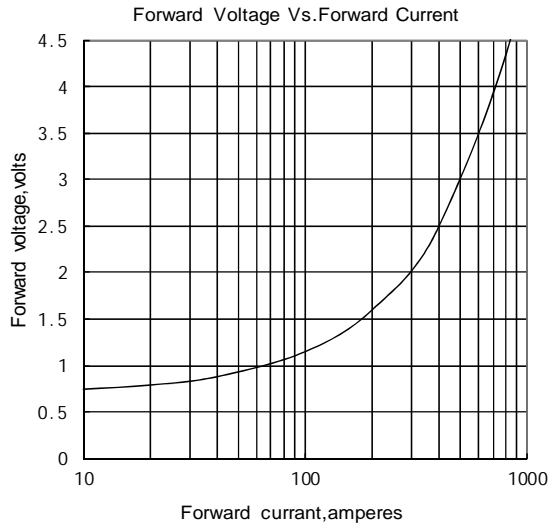


Fig.1

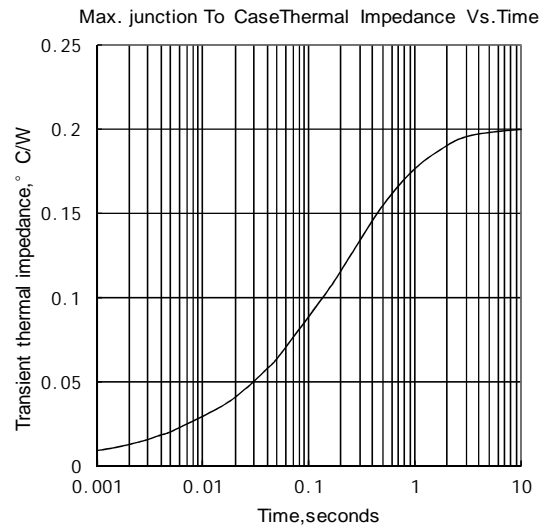


Fig.2

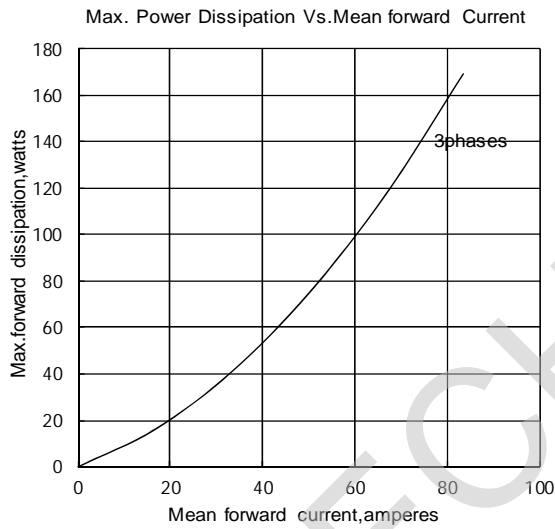


Fig.3

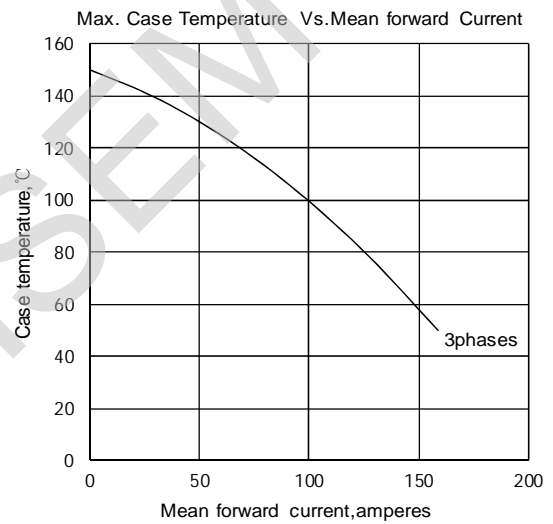


Fig.4

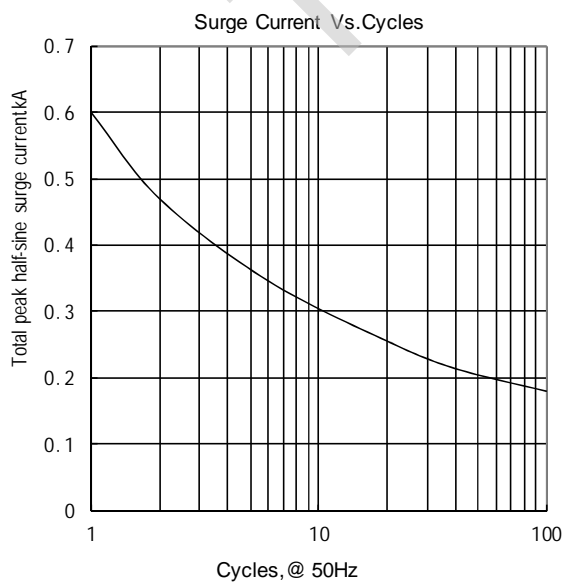


Fig.5

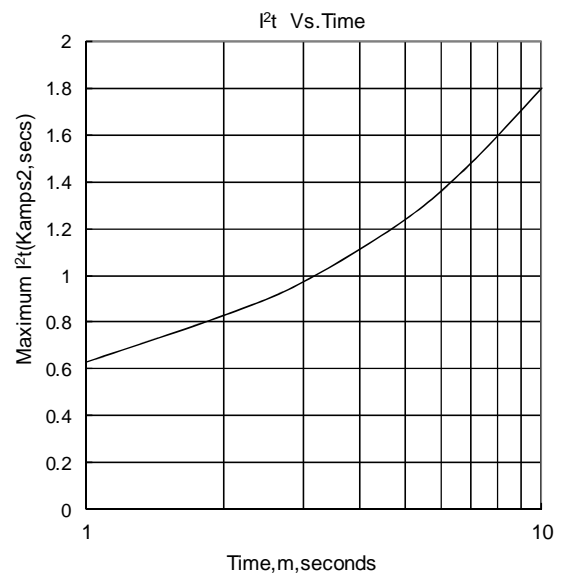
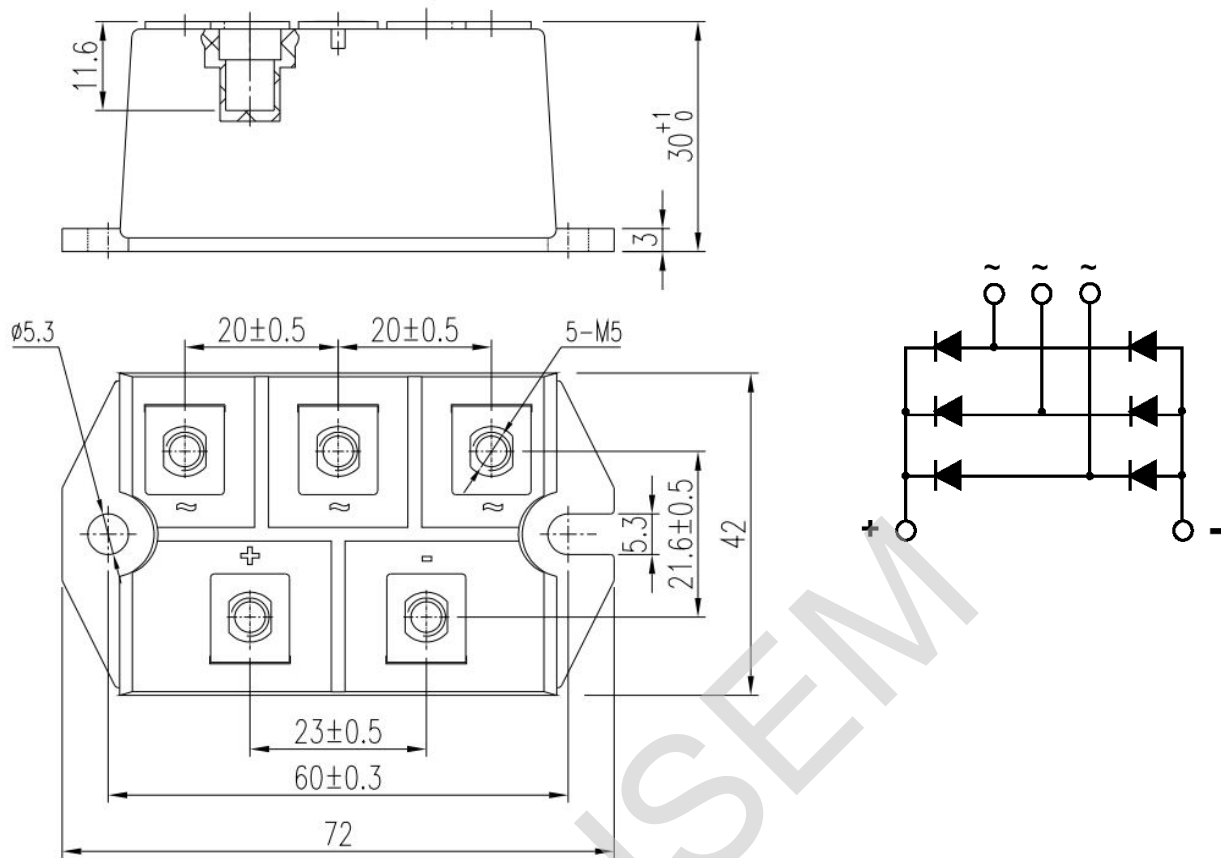


Fig.6

Outline:



Unmarked dimensional tolerance:  $\pm 0.5$ mm