



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
800V	MDS300-08-418Y5
1000V	MDS300-10-418Y5
1200V	MDS300-12-418Y5
1400V	MDS300-14-418Y5
1600V	MDS300-16-418Y5
1800V	MDS300-18-418Y5
2000V	MDS300-20-418Y5

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°C	150			300	A
I _{RRM}	Repetitive peak current	at V _{RRM}	150			30	mA
I _{FSM}	Surge forward current	10ms half sine wave V _R =0	150			4.75	kA
I ² t	I ² t for fusing coordination					112	10 ³ A ² s
V _{FO}	Threshold voltage		150			0.90	V
r _F	Forward slope resistance					0.88	mW
V _{FM}	Peak forward voltage	I _{FM} =300A	25			1.40	V
R _{th(j-c)}	Thermal resistance Junction to case	Single side cooled				0.33	°C/W
						total	
V _{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} : 1mA(max)		2500			V
F _m	Terminal connection torque(M6)			4.5		6.0	N·m
	Terminal connection torque(M8)			10.0		12.0	N·m
	Mounting torque(M5)			2.5		4.0	N·m
T _{stg}	Stored temperature			-40		125	°C
W _t	Weight				480		g
Outline	418Y5						

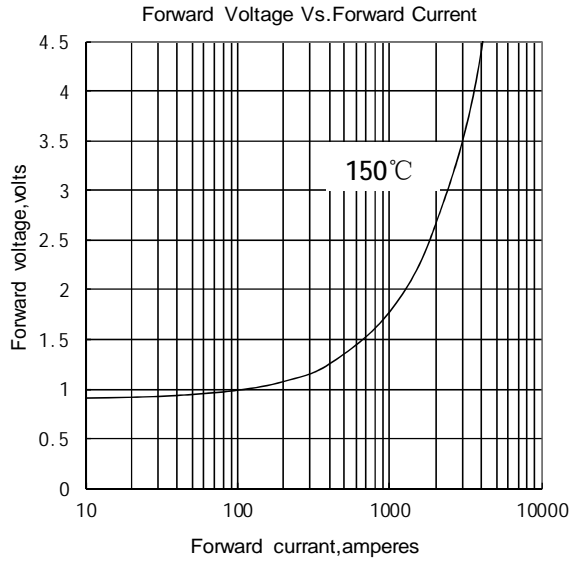


Fig.1

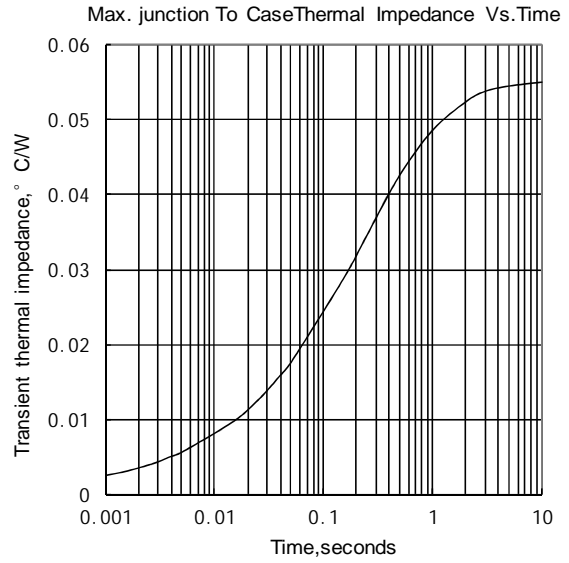


Fig.2

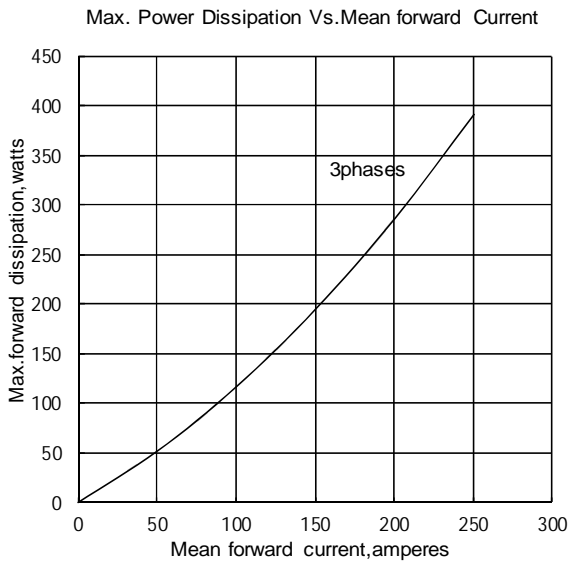


Fig.3

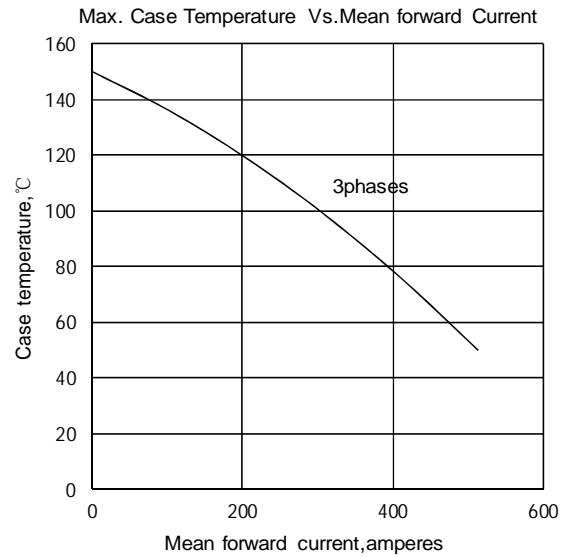


Fig.4

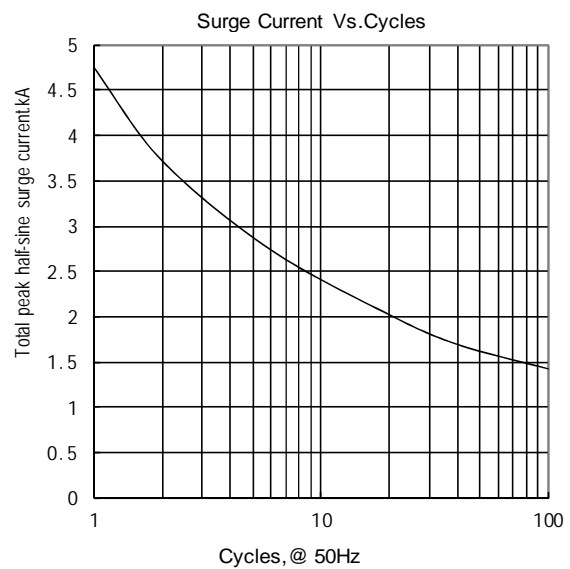


Fig.5

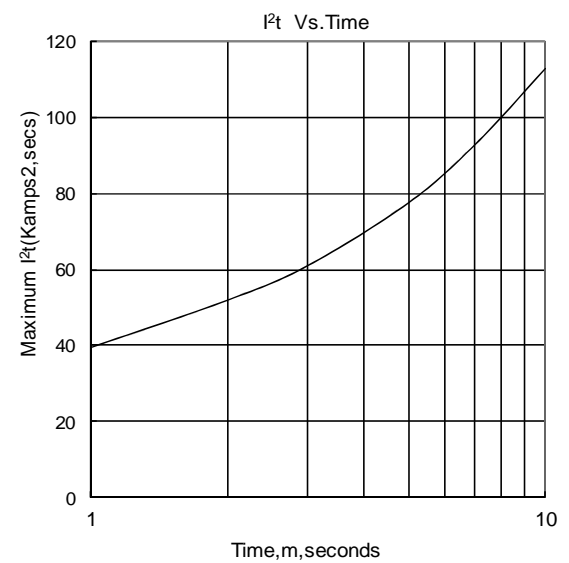
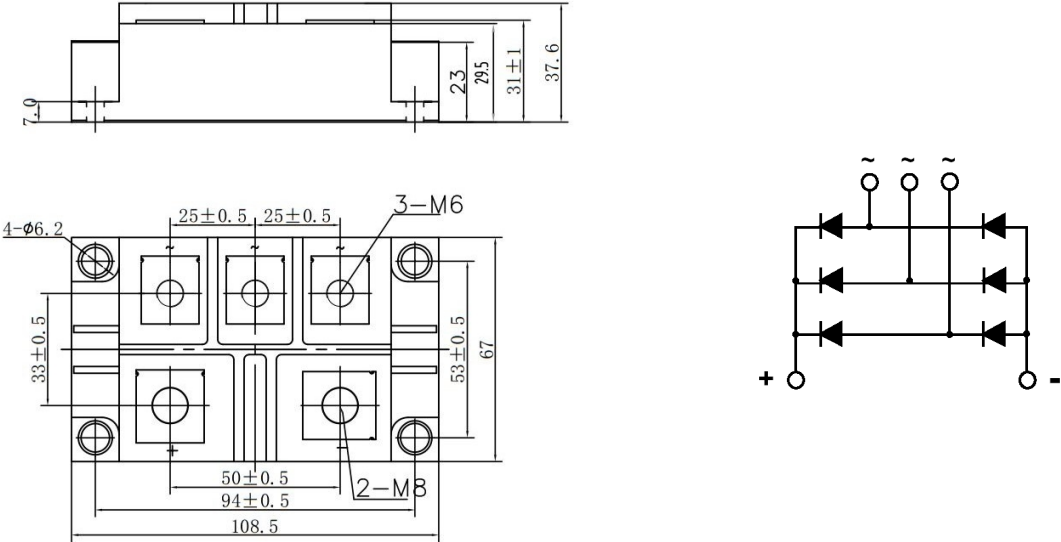


Fig.6

Outline:



Unmarked dimensional tolerance: ±0.5mm
TECHSEM reserves the right to change specifications without notice.