

Features :

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

Typical Applications

- Various rectifiers
- DC supply for PWM inverter

V_{RSM}	V_{RRM}	品名
900V	800V	MD182D80S
1100V	1000V	MD182D100S
1300V	1200V	MD182D120S
1500V	1400V	MD182D140S
1700V	1600V	MD182D160S
1900V	1800V	MD182D180S

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j(^{\circ}\text{C})$	VALUE			UNIT
				Min.	Typ.	Max.	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=100^{\circ}\text{C}$	150			182	A
$I_{F(RMS)}$	RMS forward current		150			286	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			12	mA
I_{FSM}	Surge forward current	10ms half sine wave $V_R=0.6V_{RRM}$	150			4	kA
I^2t	I^2t for fusing coordination					80	$\text{A}^2\text{s} \cdot 10^3$
V_{FO}	Threshold voltage		150			0.83	V
r_F	Forward slope resistance					1.2	$\text{m}\Omega$
V_{FM}	Peak forward voltage	$I_{FM}=550\text{A}$	25			1.55	V
$R_{th(j-c)}$	Thermal resistance Junction to case	D.C. Single side cooled per chip				0.19	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	D.C. Single side cooled per chip				0.08	$^{\circ}\text{C}/\text{W}$
V_{iso}	Isolation voltage	50Hz, R.M.S, $t=1\text{min}$, $I_{iso}: 1\text{mA}(\text{max})$		3000			V
F_m	Terminal connection torque(M6)			3.5		5.0	N·m
	Mounting torque(M6)			3.5		5.0	N·m
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				150		g
Outline	M17						

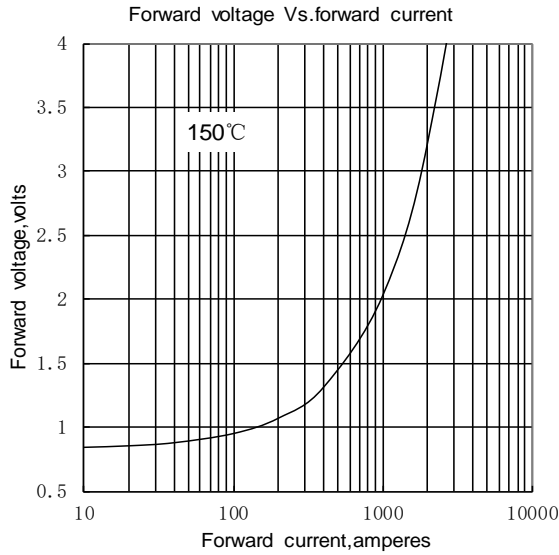


Fig1

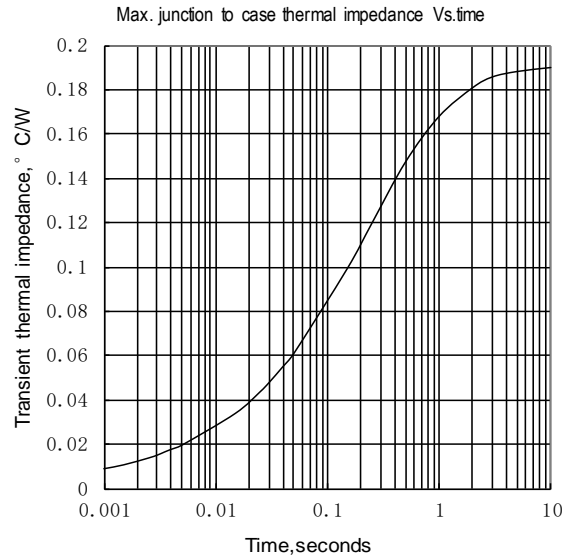


Fig2

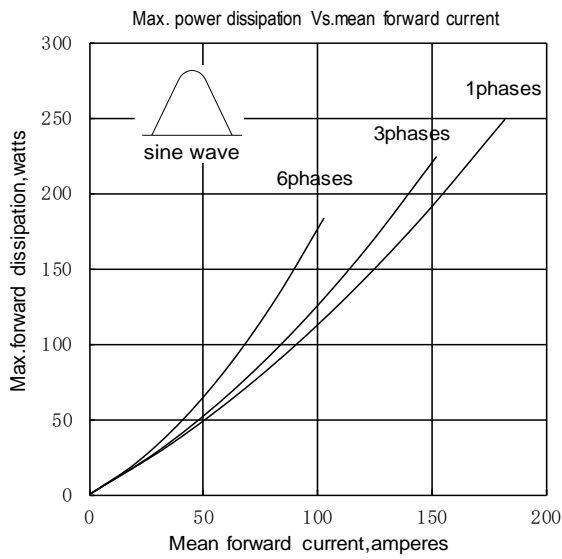


Fig3

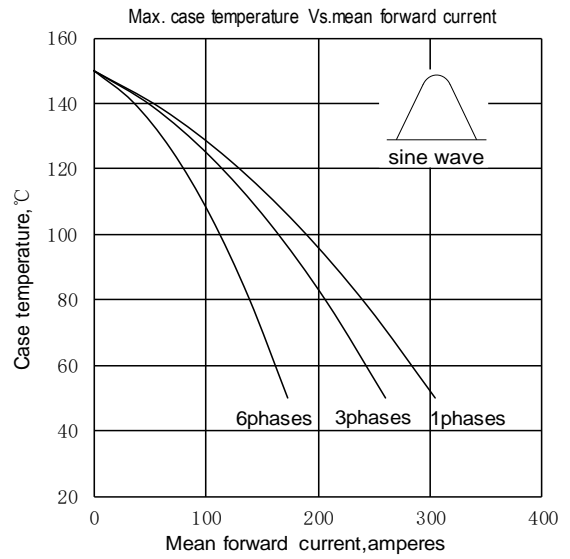


Fig4

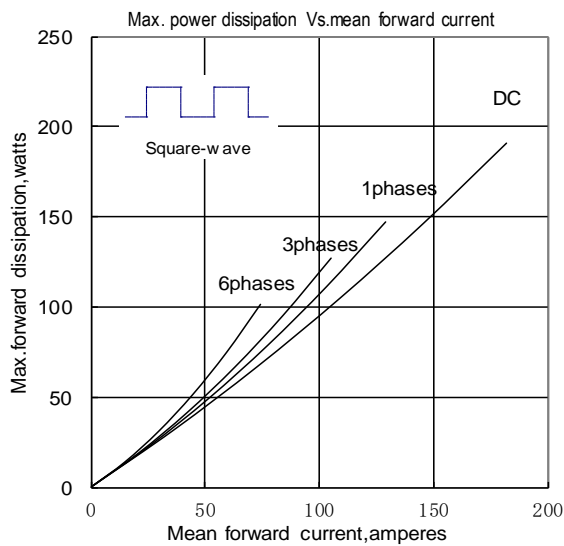


Fig5

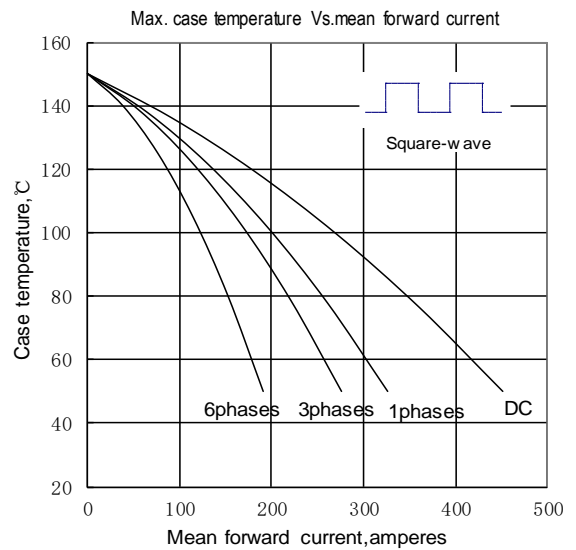


Fig6

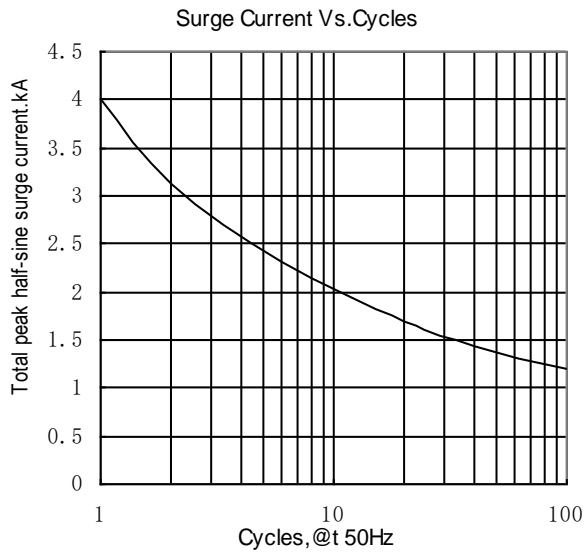
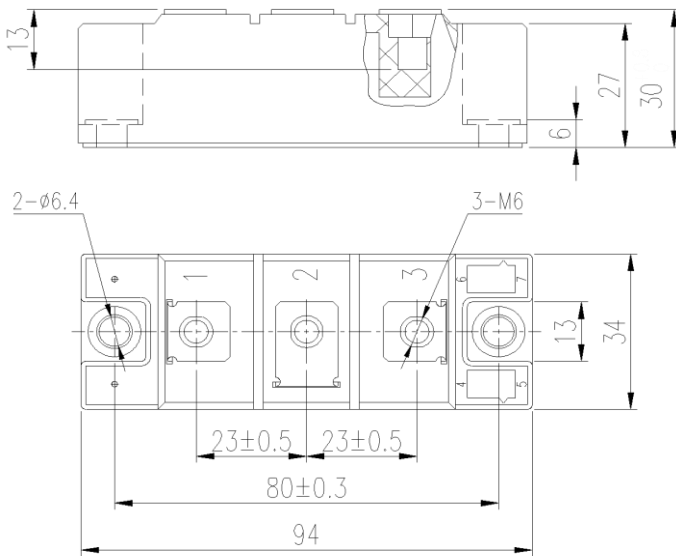
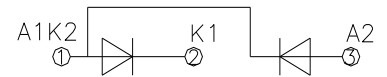


Fig7



MD182D**S



Unmarked dimensional tolerance : ±0.5mm