

**Features:**

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

Typical Applications

- Various rectifiers
- DC supply for PWM inverter

V_{RRM}	Type & Outline		
	Min	Type	Max
2000V		MDx200-20-216F3	
2200V		MDx200-22-216F3	
2500V		MDx200-25-216F3	
2500V		MD200-25-216F3G	

MDx stands for any type of **MDC**, **MDA**, **MDK**

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=100^\circ\text{C}$	150			200	A
$I_{F(RMS)}$	RMS forward current					314	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			12	mA
I_{FSM}	Surge forward current	$V_R=60\%V_{RRM}, t=10\text{ms}$ half sine,	150			7.5	kA
I^2t	I^2t for fusing coordination					252	$10^3\text{A}^2\text{s}$
V_{FO}	Threshold voltage		150			0.82	V
r_F	Forward slope resistance					0.96	$\text{m}\Omega$
V_{FM}	Peak forward voltage	$I_{FM}=600\text{A}$	25			1.48	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.18	$^\circ\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	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)			4.5		6.0	$\text{N}\cdot\text{m}$
	Mounting torque(M6)			4.5		6.0	$\text{N}\cdot\text{m}$
T_{vj}	Junction temperature			-40		150	$^\circ\text{C}$
T_{stg}	Stored temperature			-40		125	$^\circ\text{C}$
W_t	Weight				320		g
Outline				216F3			

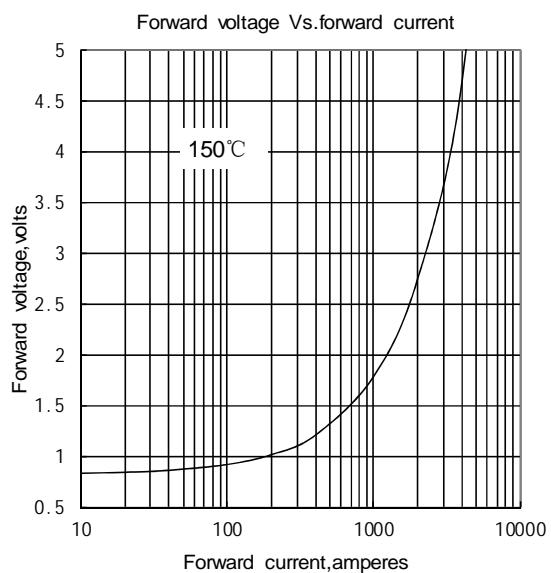


Fig.1

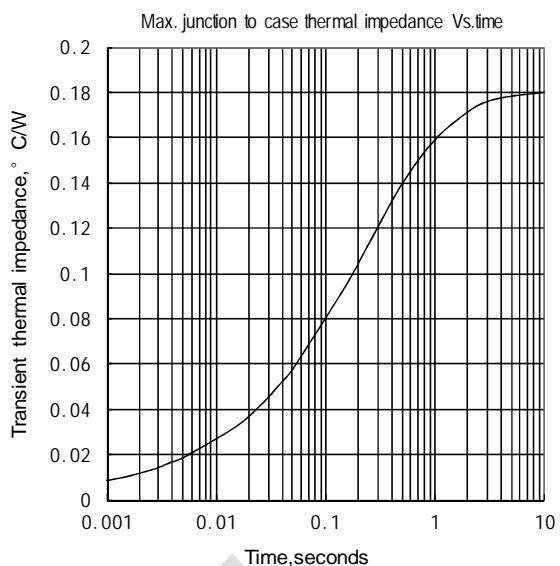


Fig.2

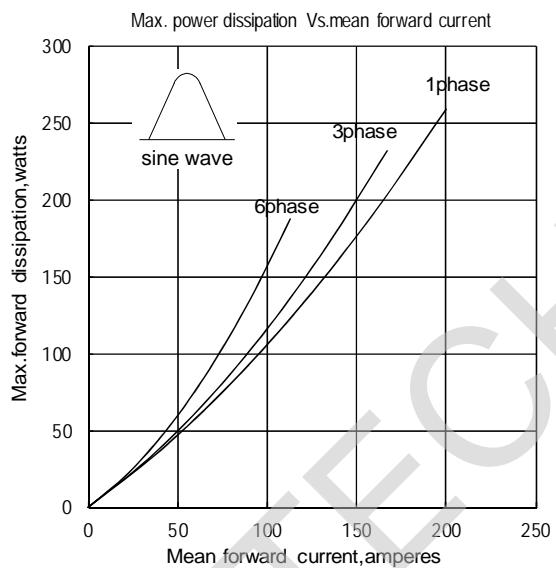


Fig.3

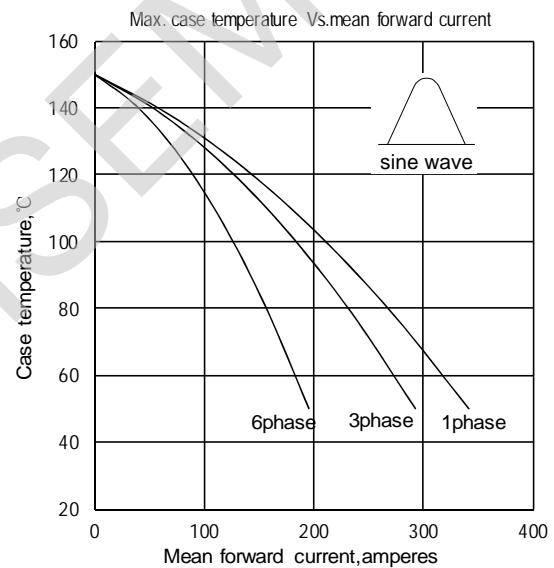


Fig.4

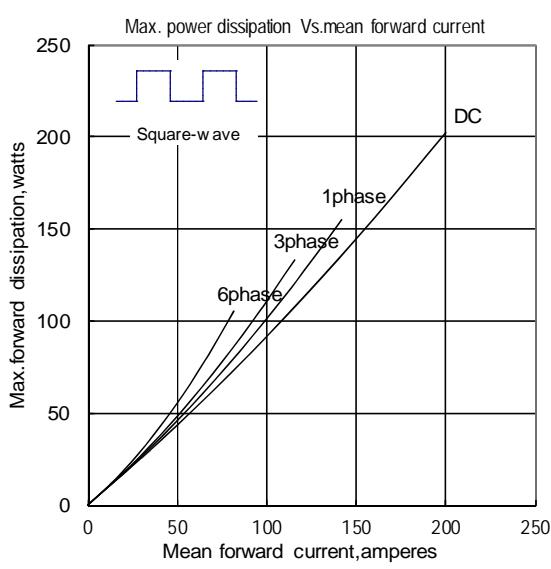


Fig.5

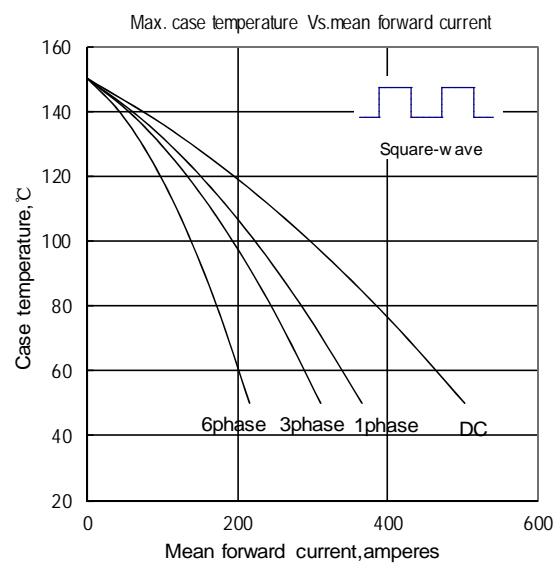


Fig.6

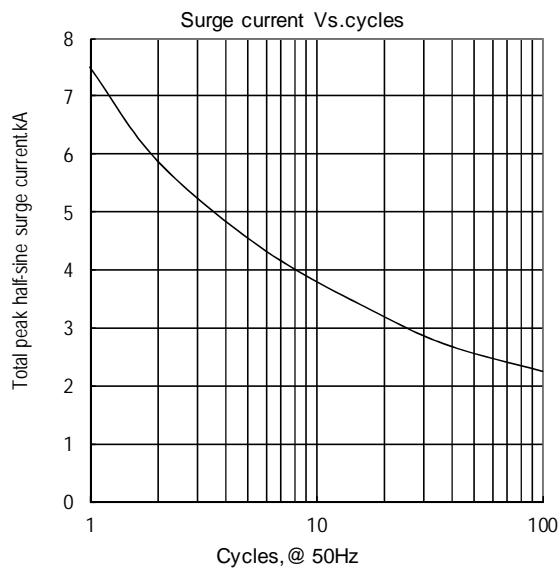


Fig.7

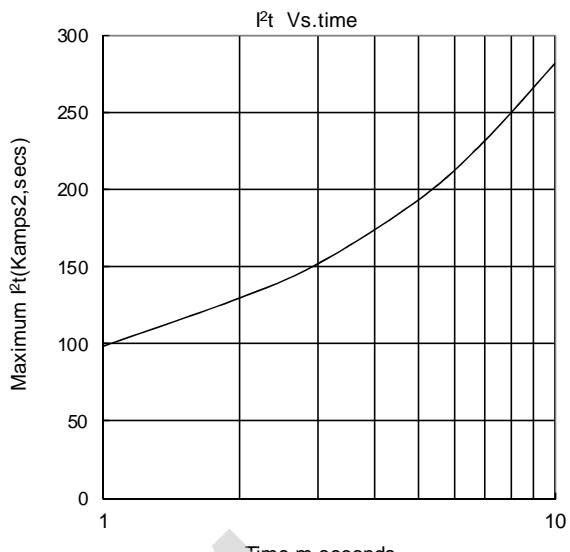
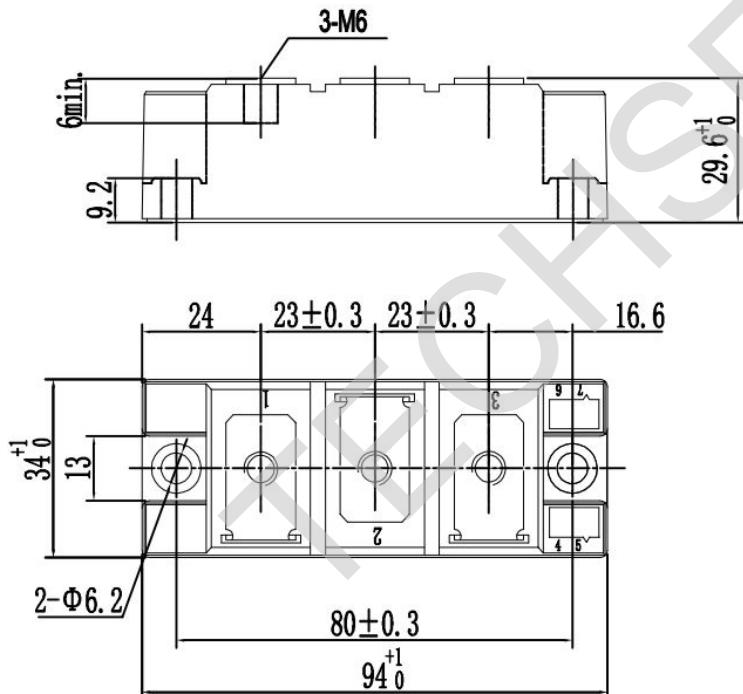
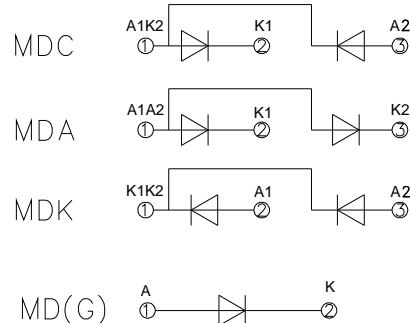


Fig.8

Outline:

Unmarked dimensional tolerance: ±0.5mm



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V_{RRM}	Type & Outline		
	Min	Type	Max
2000V		MDx250-20-413F3D	
2200V		MDx250-22-413F3D	
2500V		MDx250-25-413F3D	
2500V		MD250-25-413F3DG	

MDx stands for any type of **MDC**, **MDA**, **MDK**

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled, $T_c=100^\circ\text{C}$	150			250	A
$I_{F(RMS)}$	RMS forward current					393	A
I_{RRM}	Repetitive peak current	at V_{RRM}	150			20	mA
I_{FSM}	Surge forward current	$V_R=60\%V_{RRM}, t=10\text{ms}$ half sine	150			9.0	kA
I^2t	I^2t for fusing coordination					405	$10^3\text{A}^2\text{s}$
V_{FO}	Threshold voltage		150			0.85	V
r_F	Forward slope resistance					0.89	$\text{m}\Omega$
V_{FM}	Peak forward voltage	$I_{FM}=750\text{A}$	25			1.52	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.13	$^\circ\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.04	$^\circ\text{C}/\text{W}$
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(M8)			10		12	$\text{N}\cdot\text{m}$
	Mounting torque(M6)			4.5		6	$\text{N}\cdot\text{m}$
T_{vj}	Junction temperature			-40		150	$^\circ\text{C}$
T_{stg}	Stored temperature			-40		125	$^\circ\text{C}$
W_t	Weight				770		g
Outline				413F3D			

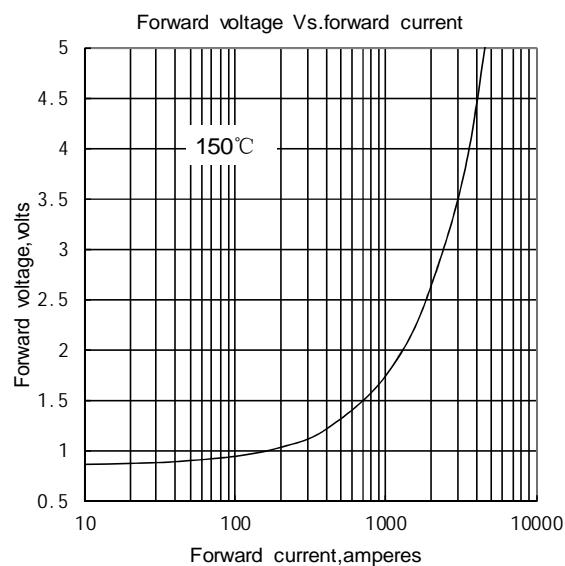


Fig.1

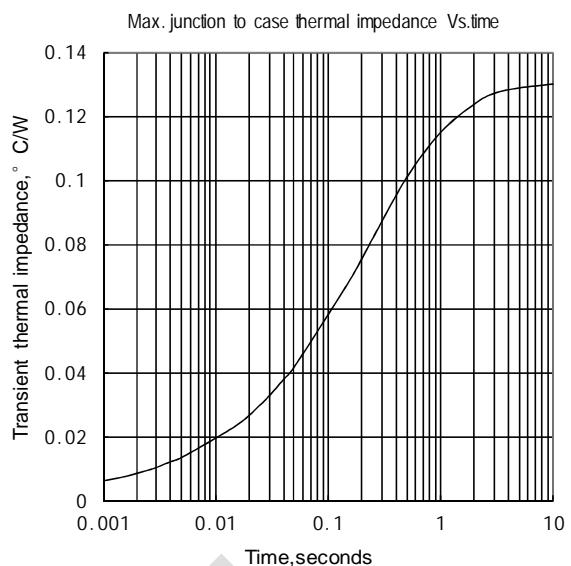


Fig.2

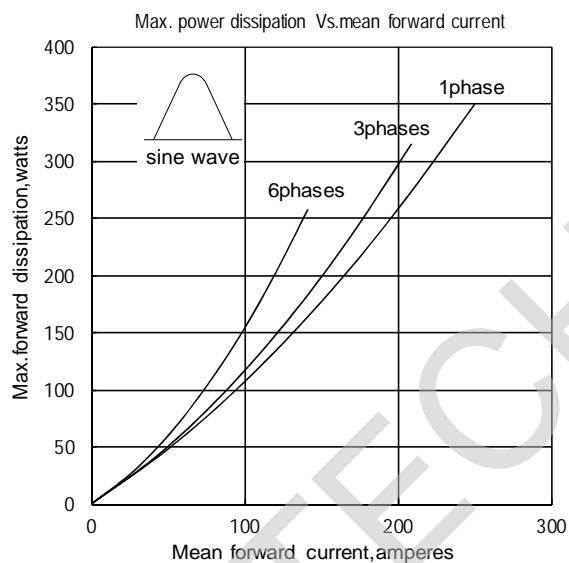


Fig.3

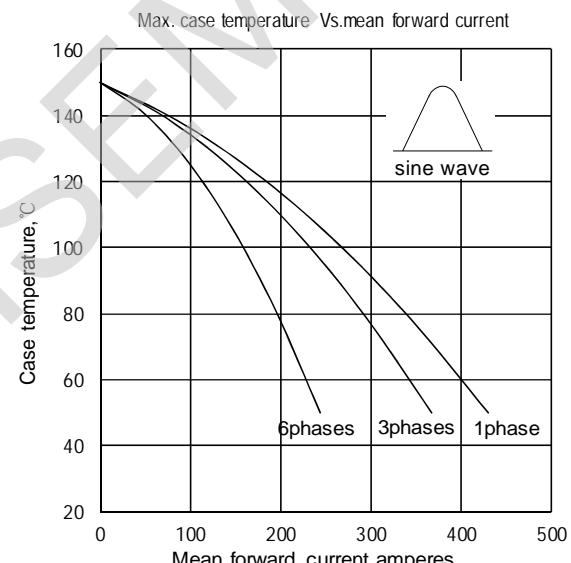


Fig.4

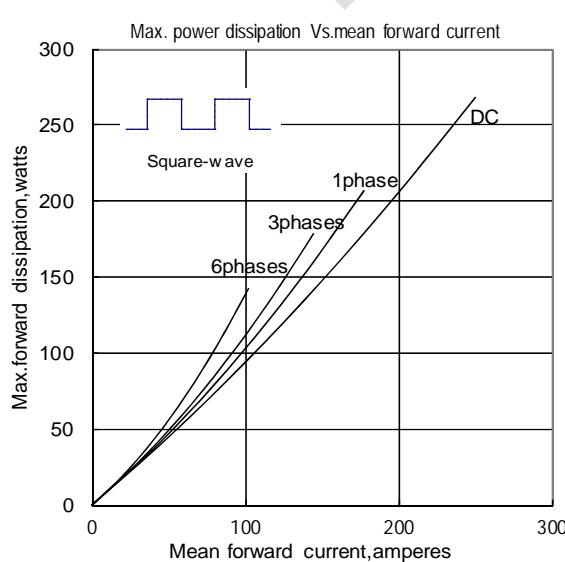


Fig.5

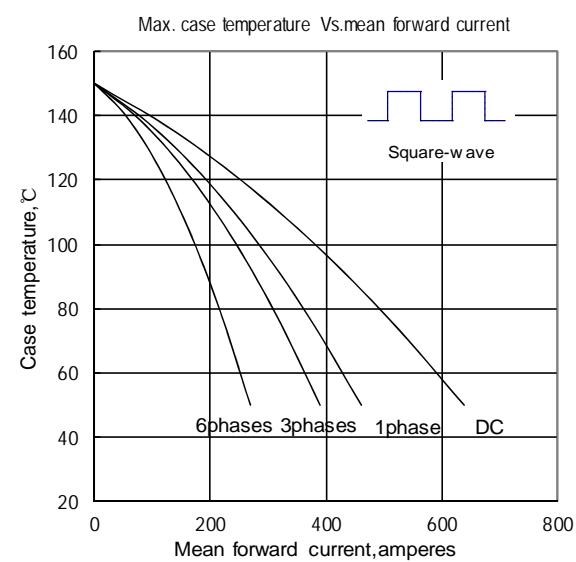


Fig.6

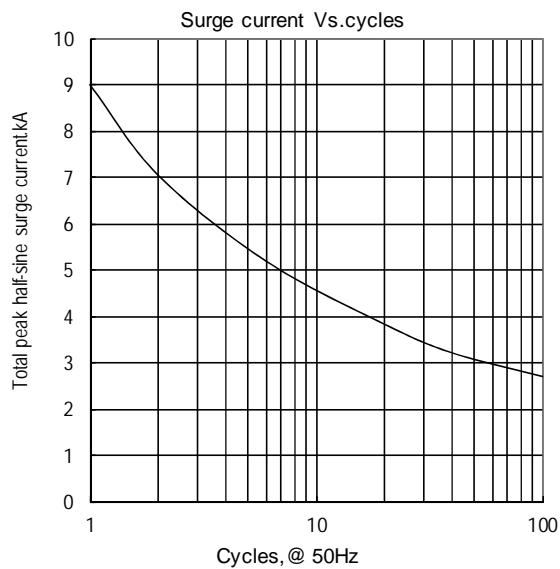


Fig.7

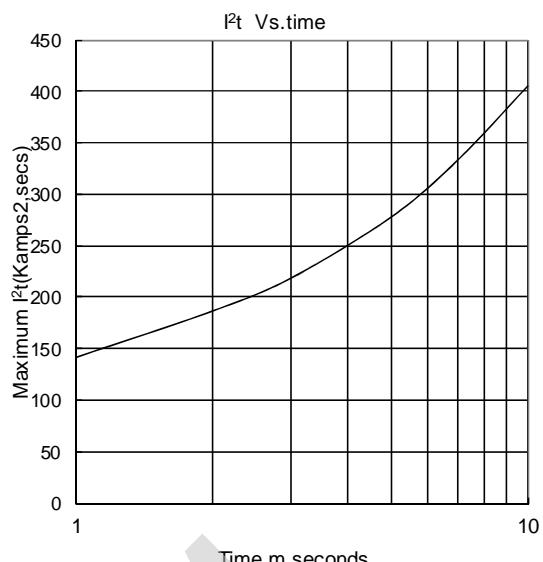
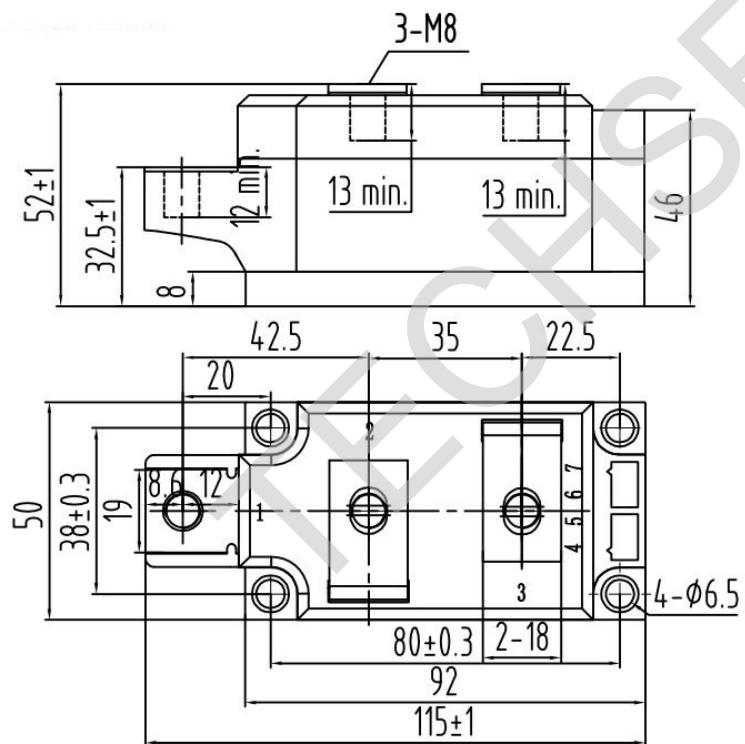


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