**Features:**

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

Typical Applications

- n Various rectifiers
- n DC supply for PWM inverter

V_{RRM}	Type & Outline
800V	MDx300-08-413F3D
1000V	MDx300-10-413F3D
1200V	MDx300-12-413F3D
1400V	MDx300-14-413F3D
1600V	MDx300-16-413F3D
1800V	MDx300-18-413F3D
1800V	MD300-18-413F3DG

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_J(^{\circ}\text{C})$	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			300	A
$I_{F(RMS)}$	RMS forward current					471	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			9.1	kA
I^2t	I^2t for fusing coordination					414	$10^3\text{A}^2\text{s}$
V_{FO}	Threshold voltage		150			0.75	V
r_F	Forward slope resistance					0.55	mΩ
V_{FM}	Peak forward voltage	$I_{FM}=900\text{A}$	25			1.35	V
$R_{th(j-c)}$	Thermal resistance Junction to case	At 180° sine. Single side cooled per chip				0.13	$^{\circ}\text{C/W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	At 180° sine. Single side cooled per chip				0.04	$^{\circ}\text{C/W}$
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(M8)			10		12	N·m
	Mounting torque(M6)			4.5		6	N·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						

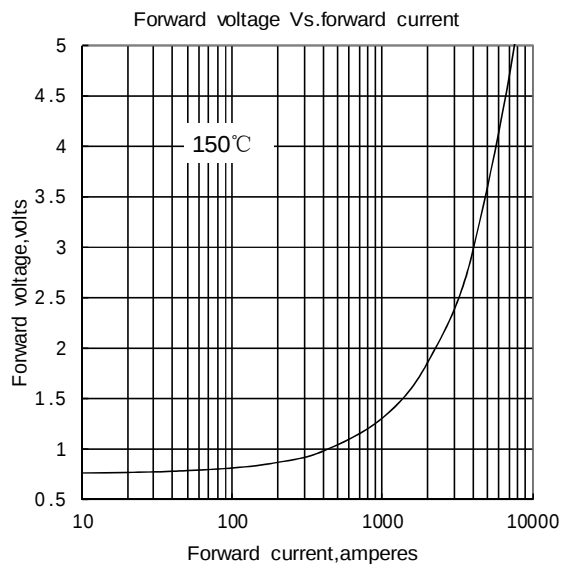


Fig.1

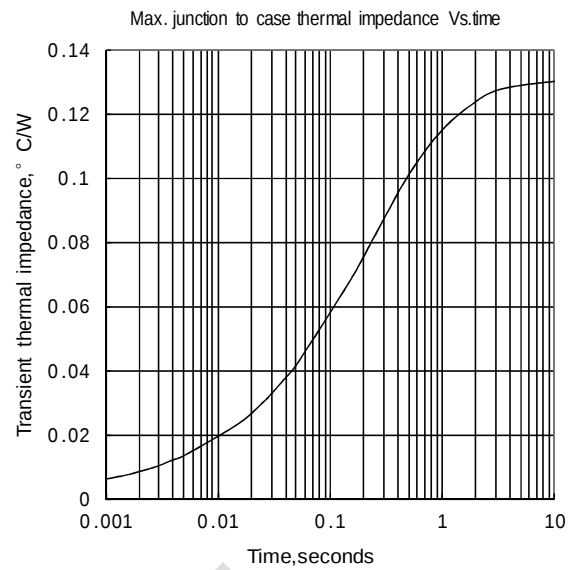


Fig.2

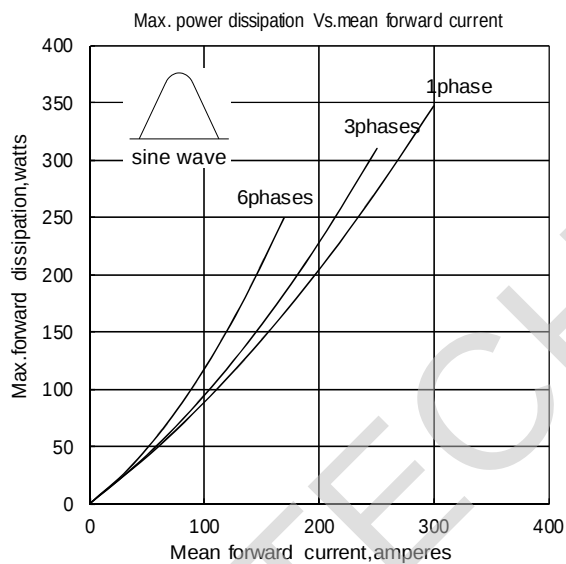


Fig.3

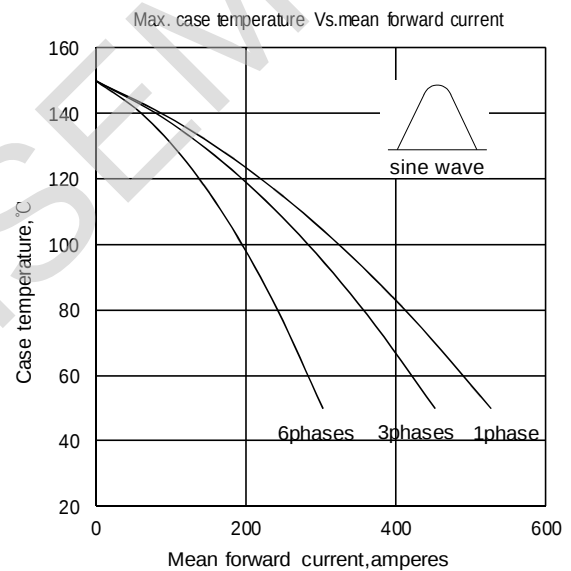


Fig.4

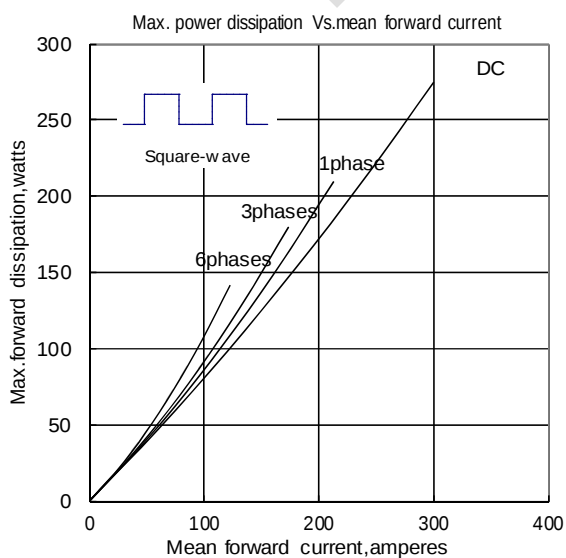


Fig.5

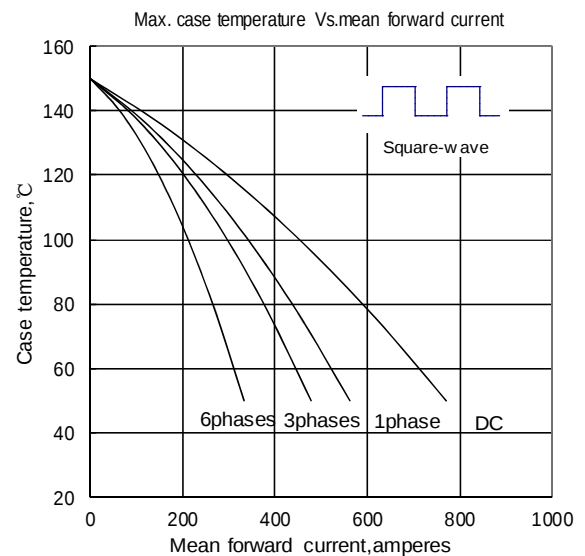


Fig.6

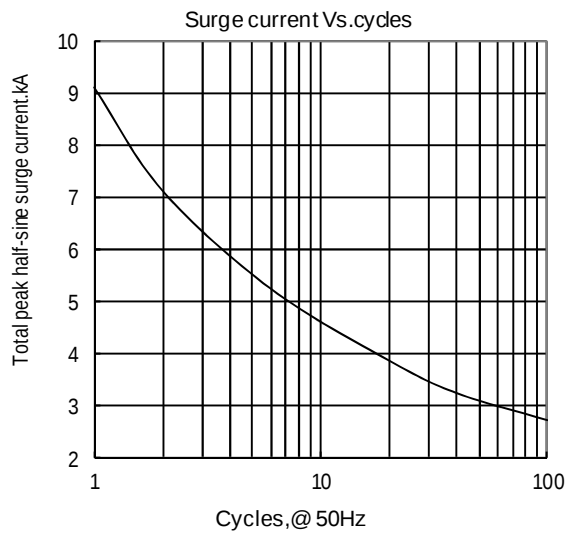


Fig.7

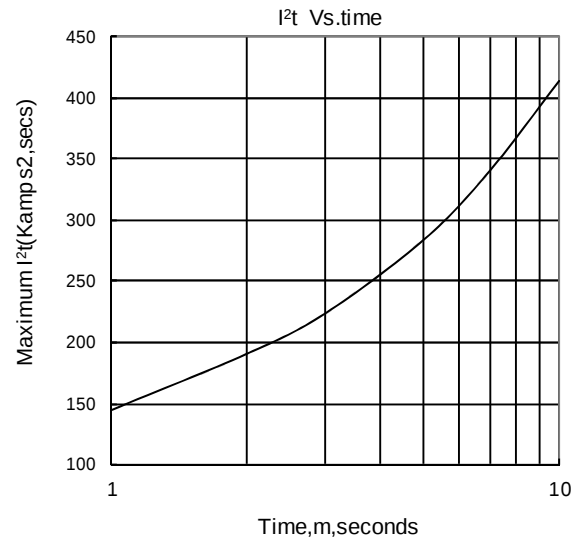
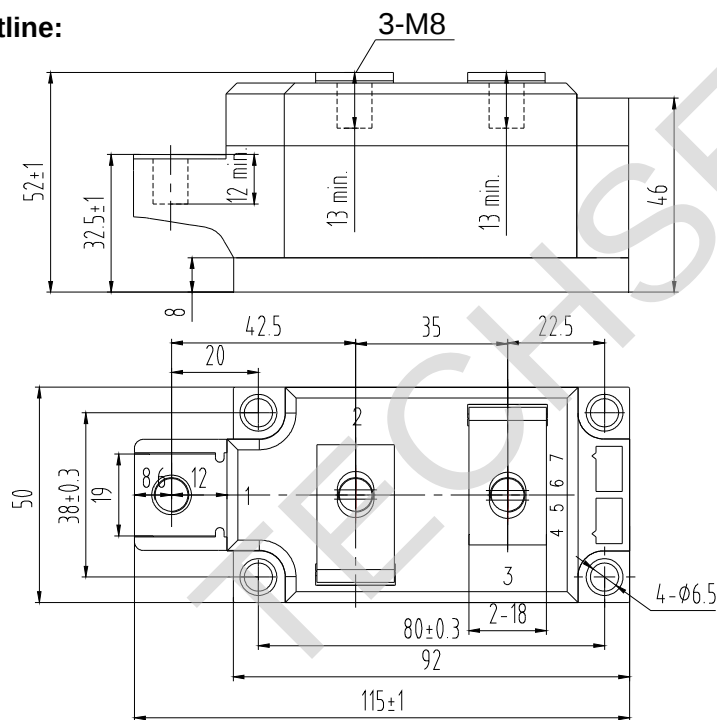
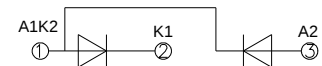


Fig.8

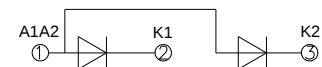
Outline:

Unmarked dimensional tolerance: $\pm 0.5\text{mm}$

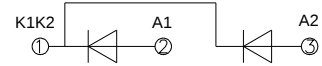
MDC



MDA



MDK



MD(G)

