

**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		
	800V	1000V	1200V
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 (°C)	VALUE			UNIT
				Min	Type	Max	
I _{F(AV)}	Mean forward current	180° half sine wave 50Hz Single side cooled, T _C =100°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=10ms half sine,	150			9.1	kA
I ² t	I ² t for fusing coordination					414	10 ³ A ² s
V _{FO}	Threshold voltage		150			0.75	V
r _F	Forward slope resistance					0.55	mΩ
V _{FM}	Peak forward voltage	I _{FM} =900A	25			1.35	V
R _{th(j-c)}	Thermal resistance Junction to case	Single side cooled per chip				0.13	°C/W
R _{th(c-h)}	Thermal resistance case to heatsink	Single side cooled per chip				0.04	°C/W
V _{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} :1mA(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	°C
T _{stg}	Stored temperature			-40		125	°C
W _t	Weight				770		g
Outline		413F3D					

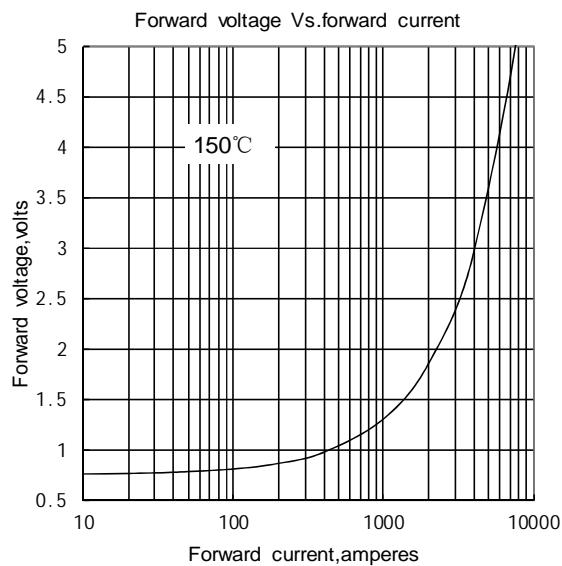


Fig.1

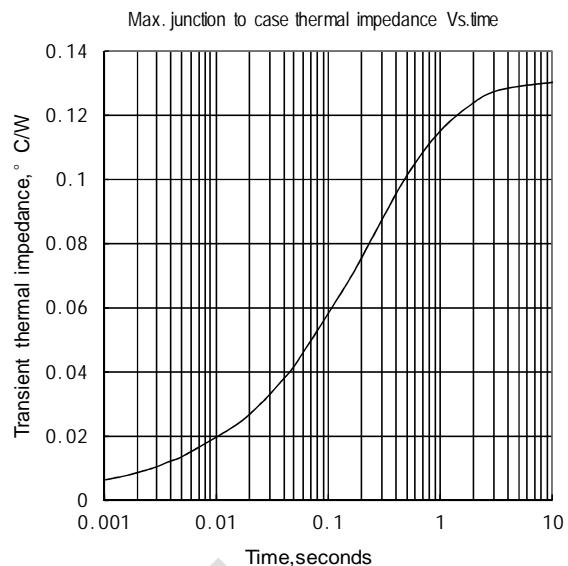


Fig.2

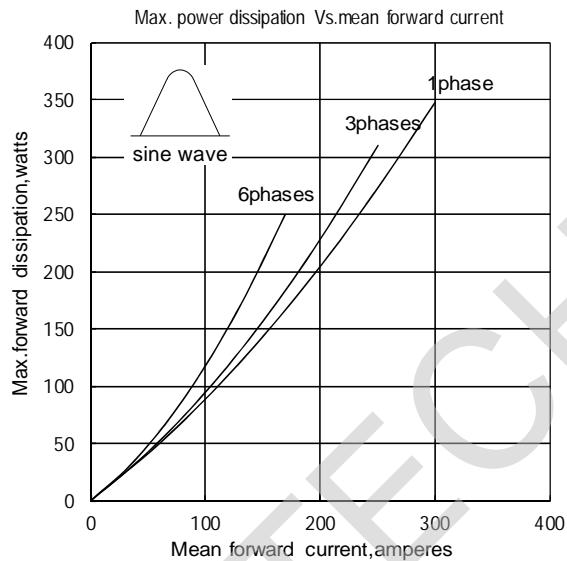


Fig.3

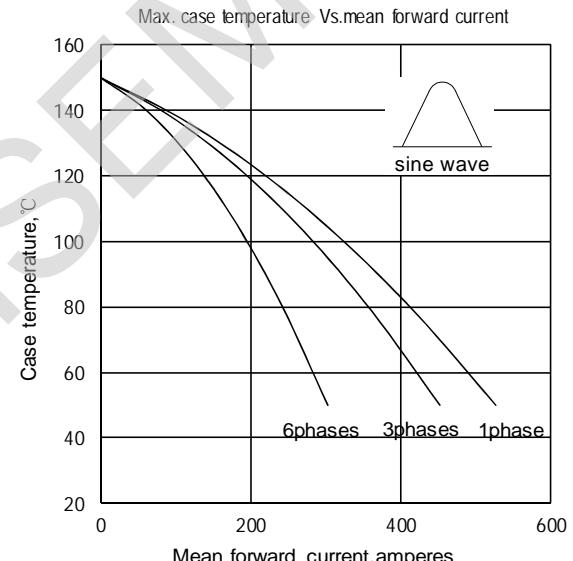


Fig.4

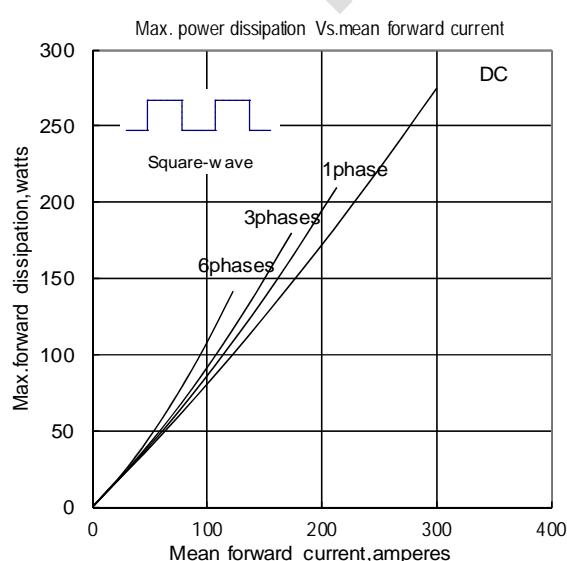


Fig.5

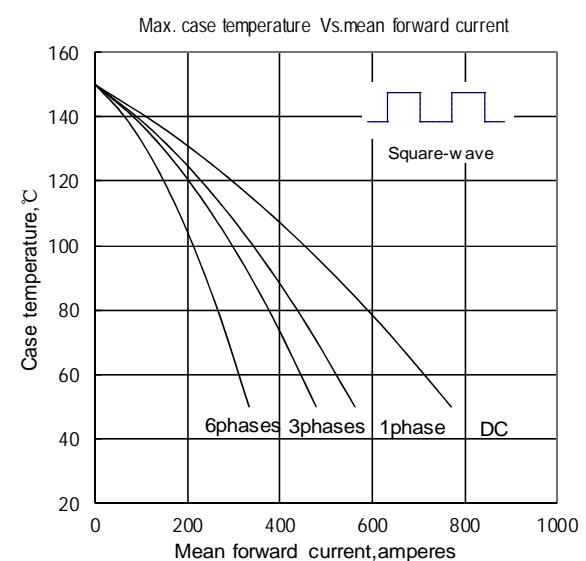


Fig.6

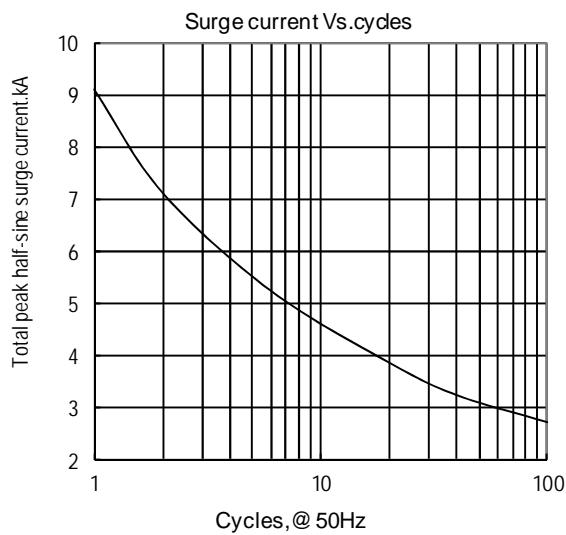


Fig.7

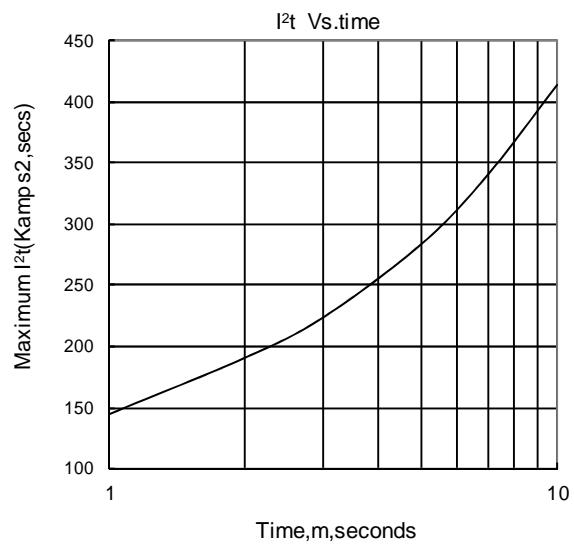


Fig.8

Outline: