

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
600V	MDx1200-06-412F3
800V	MDx1200-08-412F3
1000V	MDx1200-10-412F3
1200V	MDx1200-12-412F3
1400V	MDx1200-14-412F3
1600V	MDx1200-16-412F3
1800V	MDx1200-18-412F3
1800V	MD1200-18-412F3G

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 =85°C	150			1200	A
I _{F(RMS)}	RMS forward current					1884	A
I _{RRM}	Repetitive peak current	at V _{RRM}	150			50	mA
I _{FSM}	Surge forward current	V _R =60%V _{RRM} , t=10ms half sine.	150			34	kA
I ² t	I ² t for fusing coordination					4500	10 ³ A ² s
V _{FO}	Threshold voltage		150			0.70	V
r _F	Forward slope resistance					0.138	mΩ
V _{FM}	Peak forward voltage	I _{FM} =3000A	25			1.44	V
R _{th(j-c)}	Thermal resistance Junction to case	Single side cooled per chip				0.048	°C/W
R _{th(c-h)}	Thermal resistance case to heatsink	Single side cooled per chip				0.020	°C/W
V _{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} :1mA(MAX)		3000			V
F _m	Terminal connection torque(M12)			12		16	N·m
	Mounting torque(M8)			10		12	N·m
T _{vj}	Junction temperature			-40		150	°C
T _{stg}	Stored temperature			-40		125	°C
W _t	Weight				3660		g
Outline	412F3						

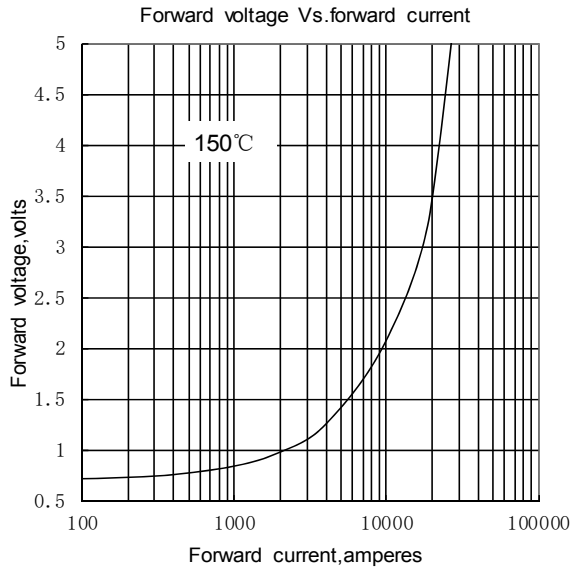


Fig.1

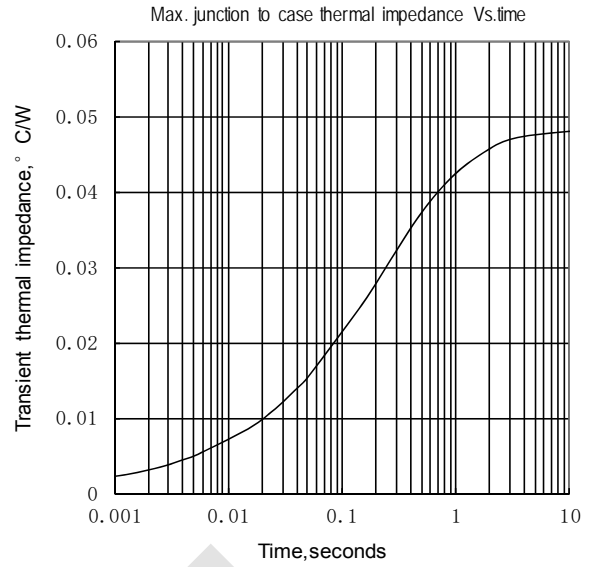


Fig.2

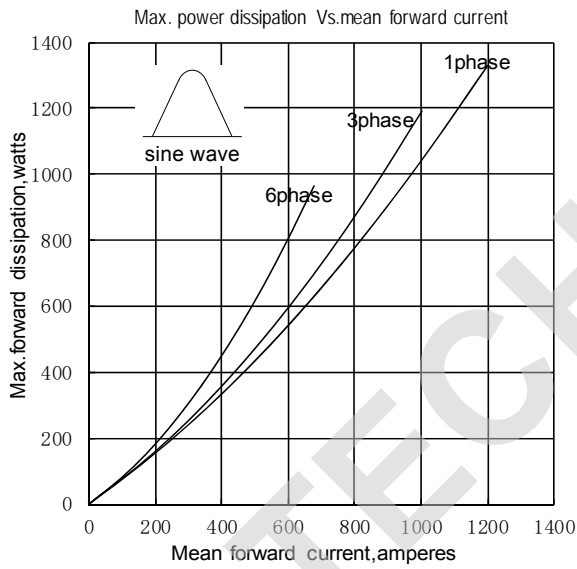


Fig.3

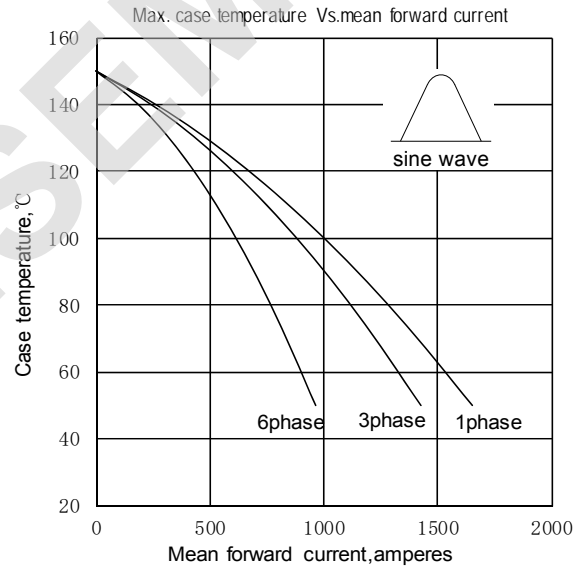


Fig.4

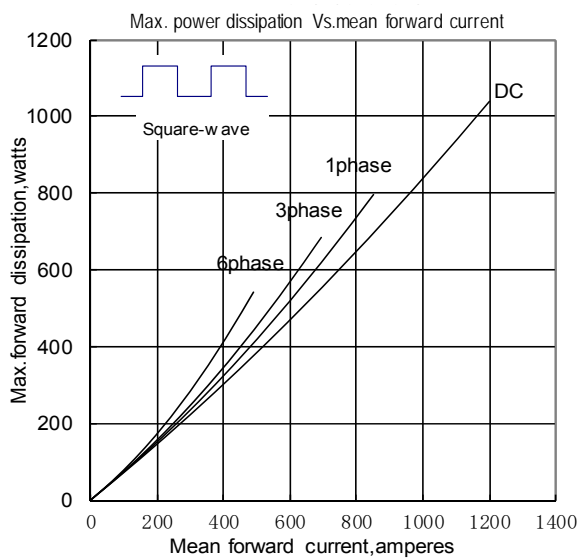


Fig.5

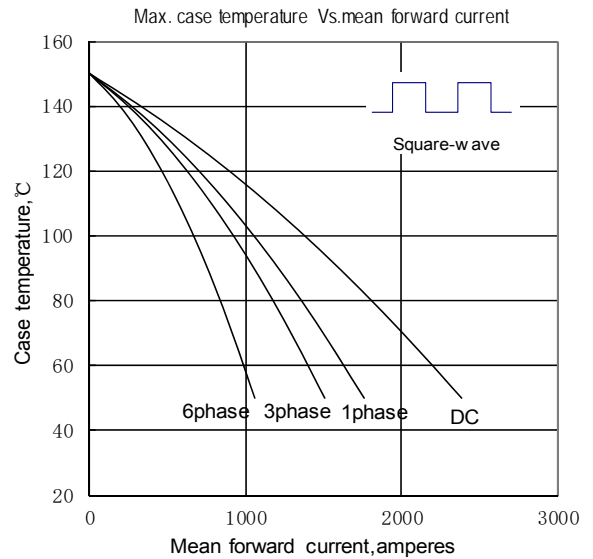


Fig.6

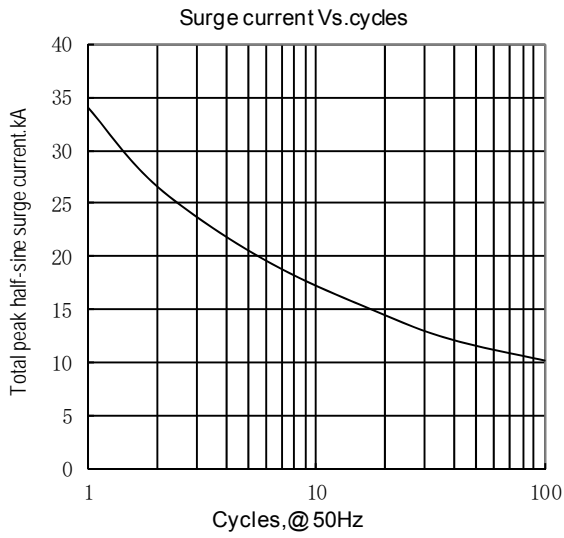


Fig.7

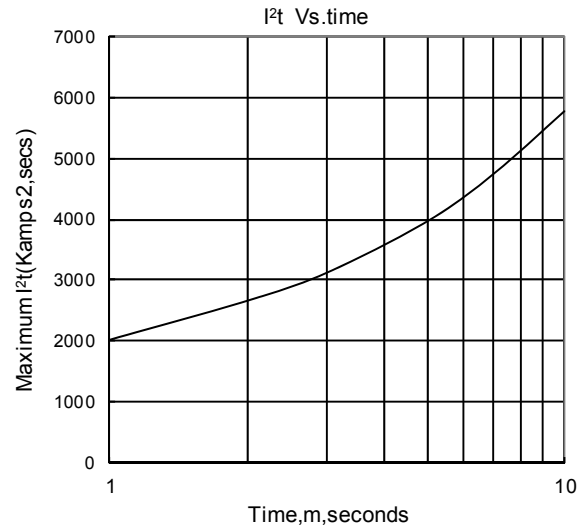
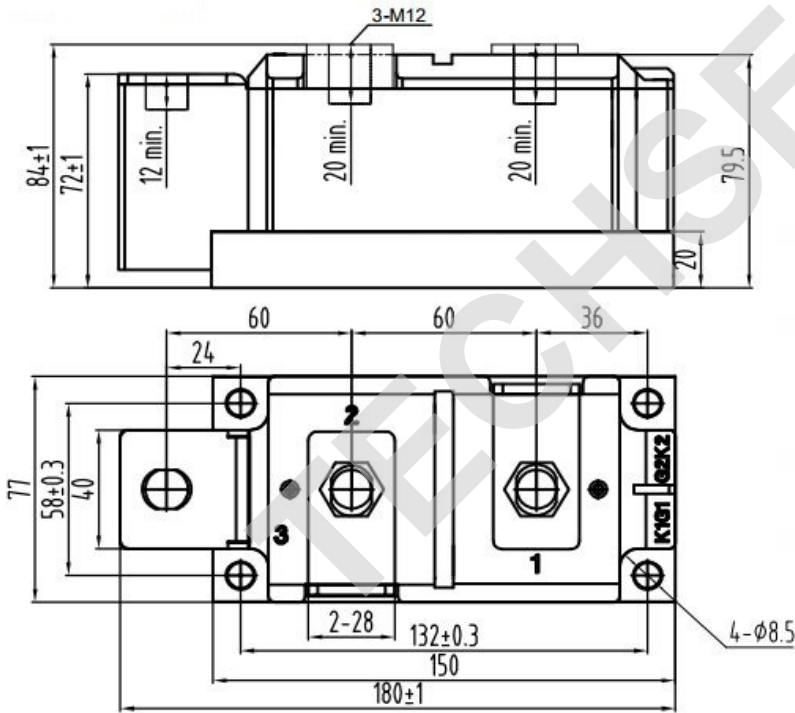


Fig.8

Outline:



Unmarked dimensional tolerance: ±0.5mm

