



Features:

- n Isolated mounting base 3000V~
- n Solder joint 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	MDC110-08-224H3
1000V	MDC110-10-224H3
1200V	MDC110-12-224H3
1400V	MDC110-14-224H3
1600V	MDC110-16-224H3
1800V	MDC110-18-224H3

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			110	A
I _{F(RMS)}	RMS forward current					173	A
I _{RRM}	Repetitive peak current	at V _{RRM}	150			8	mA
I _{FSM}	Surge forward current	V _R =60%V _{RRM} , t=10ms half sine,	150			2.0	kA
I ² t	I ² t for fusing coordination					20.0	10 ³ A ² s
V _{FO}	Threshold voltage		150			0.80	V
r _F	Forward slope resistance					1.74	mΩ
V _{FM}	Peak forward voltage	I _{FM} =330A	25			1.55	V
R _{th(j-c)}	Thermal resistance Junction to case	At 180° sine. Single side cooled				0.35	°C/W
R _{th(c-h)}	Thermal resistance case to heatsink	At 180° sine. Single side cooled				0.20	°C/W
V _{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} :1mA(MAX)		3000			V
F _m	Terminal connection torque(M5)			2.5		4	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				100		g
Outline	224H3						

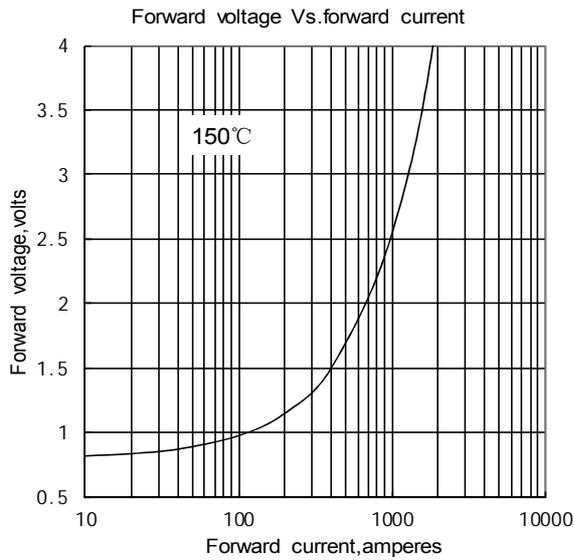


Fig1

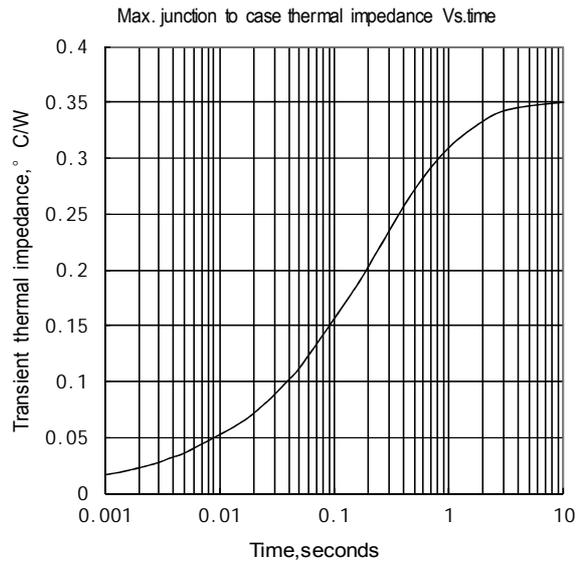


Fig2

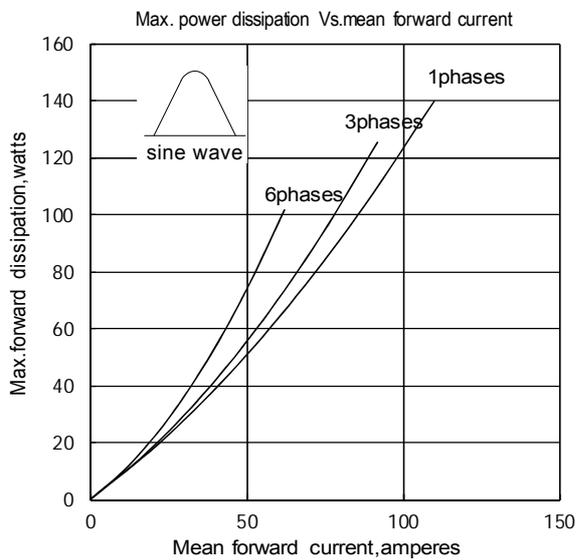


Fig3

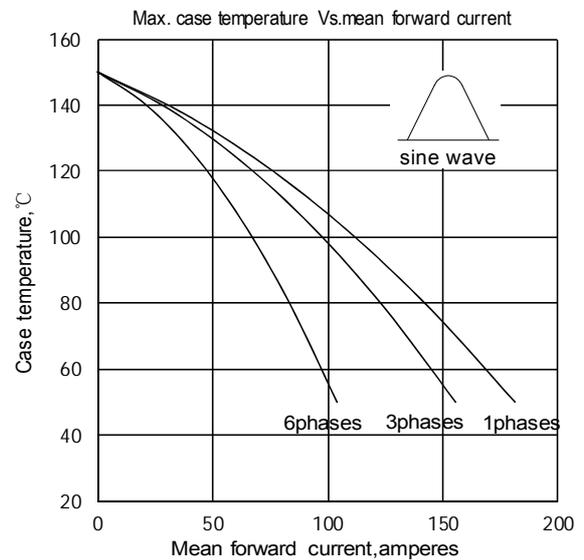


Fig4

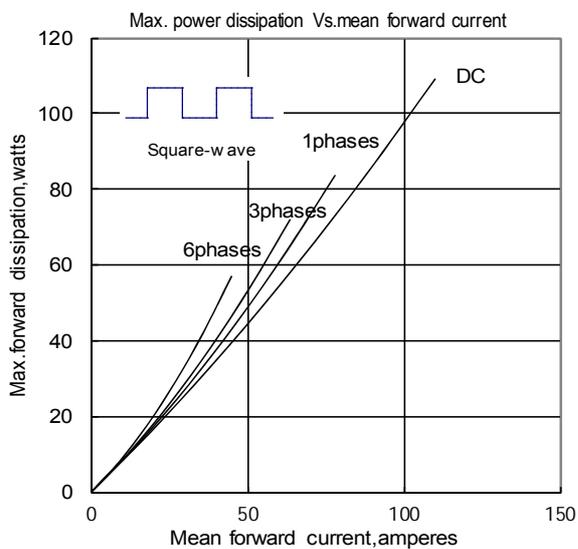


Fig5

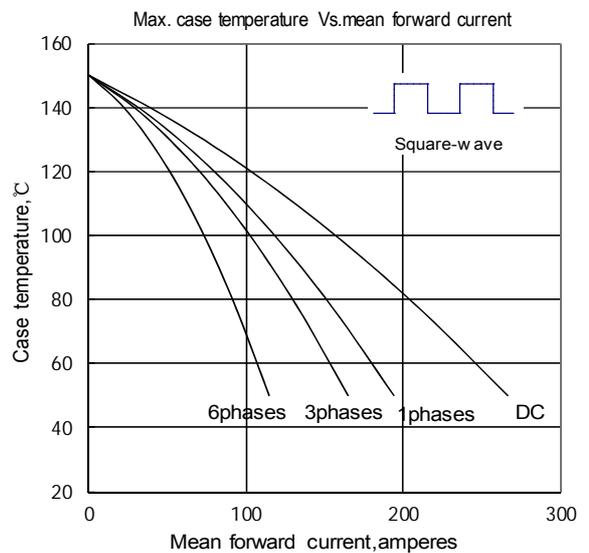


Fig6

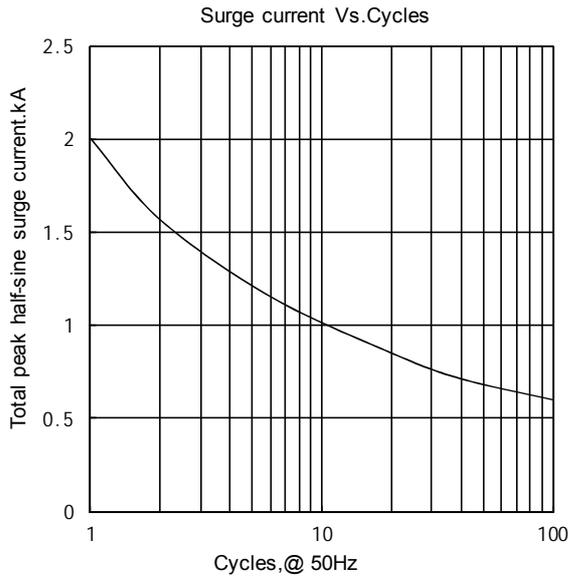


Fig.7

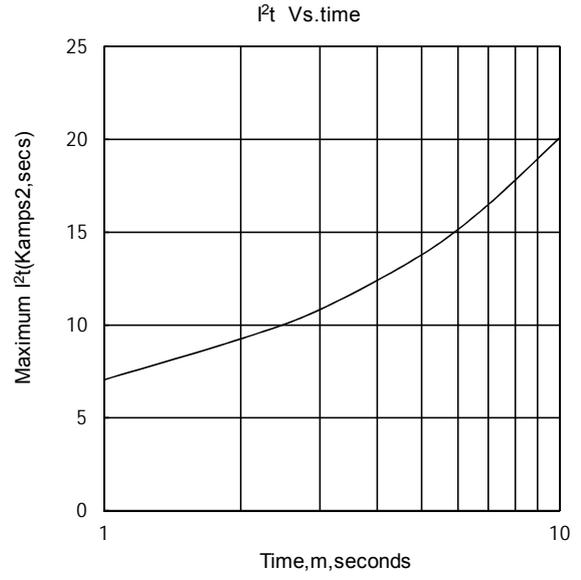
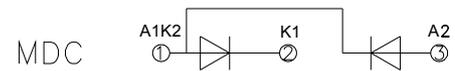
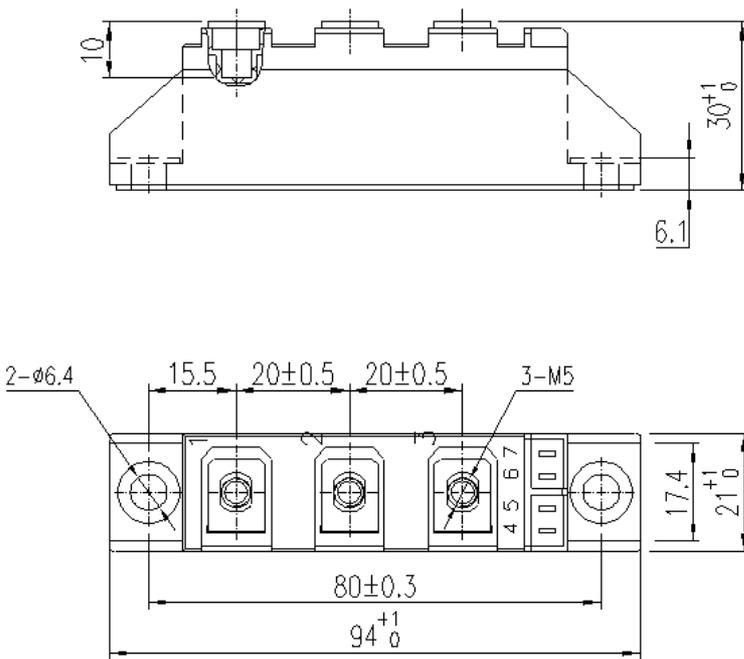


Fig.8

Outline:



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

TECHSEM reserves the right to change specifications without notice.