

**Features:**

- Isolated mounting base 3000V~
- Solder joint technology with increased power cycling capability
- Space and weight saving

**Typical Applications:**

- Various rectifiers
- DC supply for PWM inverter

V <sub>RRM</sub>	Type & Outline		
	600V	800V	1000V
1200V	MDC160-06-229H3	MDC160-08-229H3	MDC160-10-229H3
1400V	MDC160-12-229H3	MDC160-14-229H3	MDC160-16-229H3
1600V	MDC160-18-229H3		
1800V			

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T <sub>J</sub> (°C)	VALUE			UNIT
				Min	Type	Max	
I <sub>F(AV)</sub>	Mean forward current	180° half sine wave 50Hz Single side cooled, T <sub>C</sub> =100°C	150			160	A
I <sub>F(RMS)</sub>	RMS forward current					251	A
I <sub>RRM</sub>	Repetitive peak current	at V <sub>RRM</sub>	150			12	mA
I <sub>FSM</sub>	Surge forward current	10ms half sine wave V <sub>R</sub> =0.6V <sub>RRM</sub>	150			4	kA
I <sup>2</sup> t	I <sup>2</sup> t for fusing coordination					80	A <sup>2</sup> s*10 <sup>3</sup>
V <sub>FO</sub>	Threshold voltage		150			0.85	V
r <sub>F</sub>	Forward slope resistance					1.25	mΩ
V <sub>FM</sub>	Peak forward voltage	I <sub>FM</sub> =480A	25			1.50	V
R <sub>th(j-c)</sub>	Thermal resistance Junction to case	Single side cooled per chip				0.20	°C /W
R <sub>th(c-h)</sub>	Thermal resistance case to heatsink	Single side cooled per chip				0.08	°C /W
V <sub>iso</sub>	Isolation voltage	50Hz,R.M.S,t=1min, I <sub>iso</sub> :1mA(max)		3000			V
F <sub>m</sub>	Terminal connection torque(M6)			4.5		6	N·m
	Mounting torque(M6)			4.5		6	N·m
T <sub>vj</sub>	Junction temperature			-40		150	°C
T <sub>stg</sub>	Stored temperature			-40		125	°C
W <sub>t</sub>	Weight				165		g
Outline		229H3					

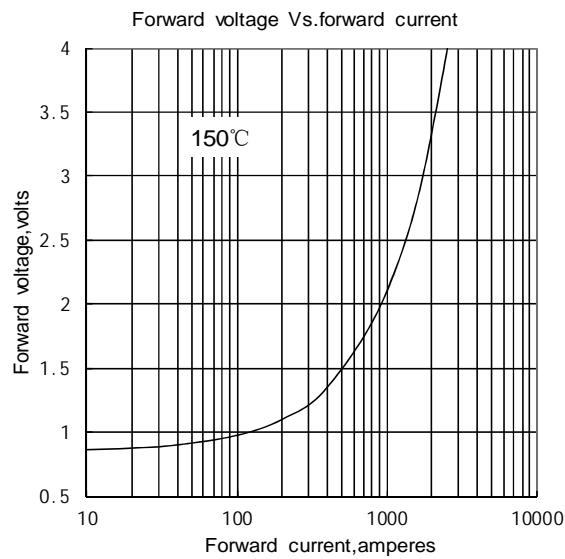


Fig1

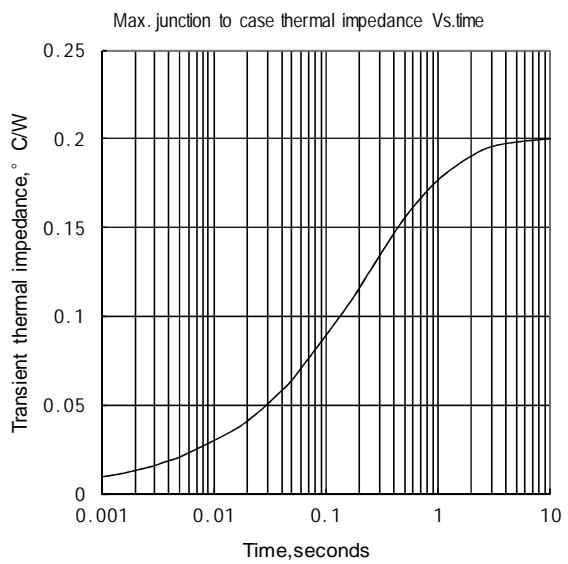


Fig2

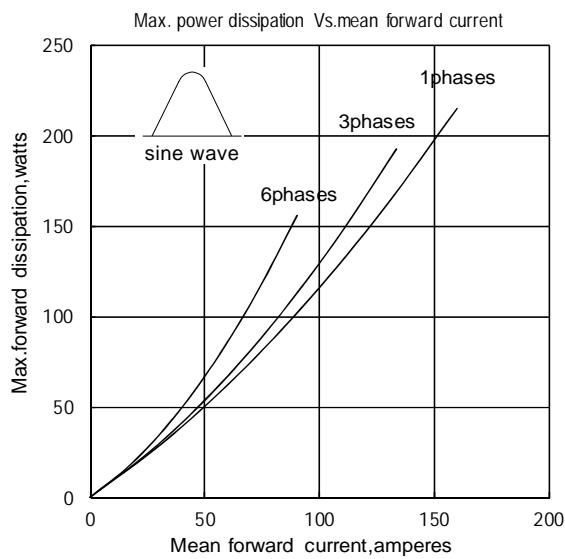


Fig3

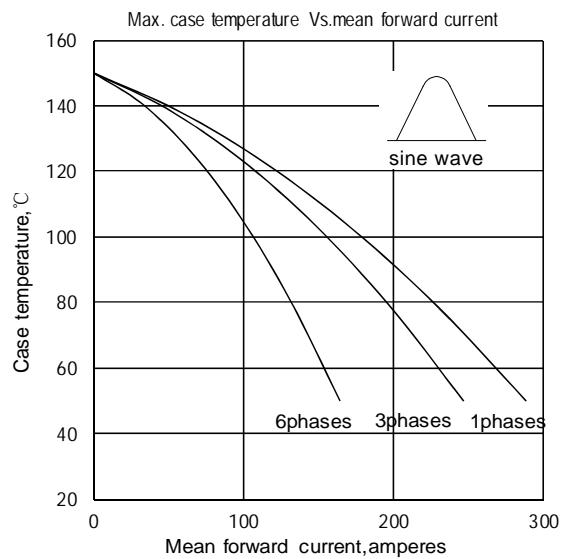


Fig4

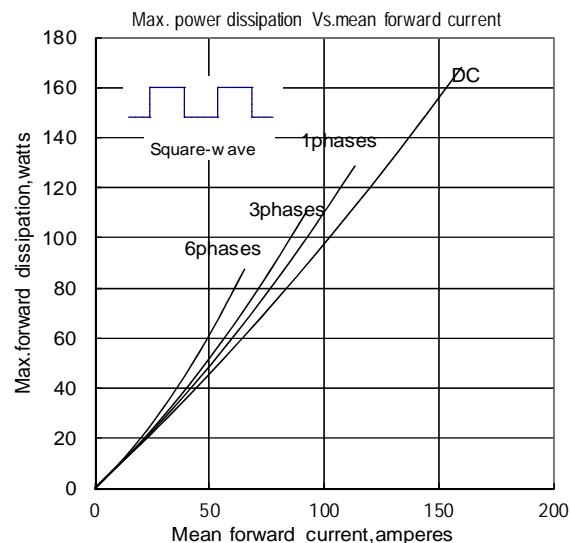


Fig5

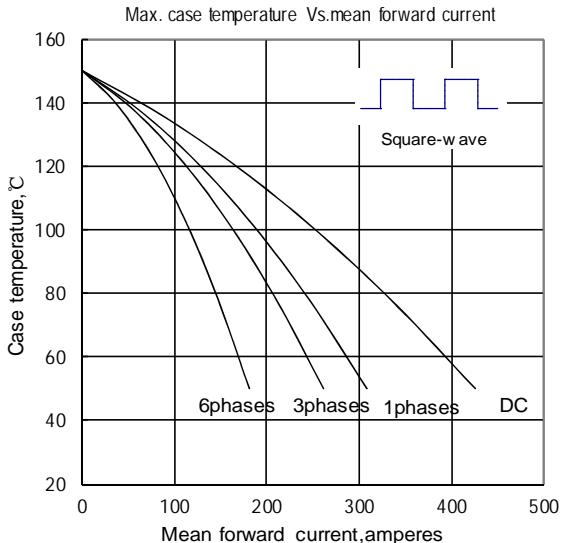


Fig6

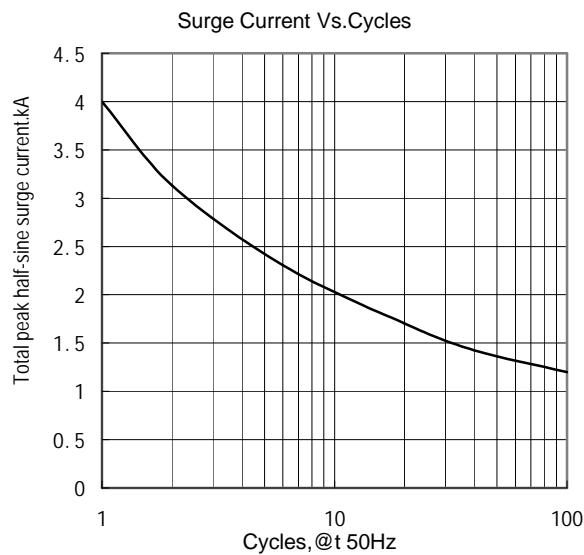


Fig7

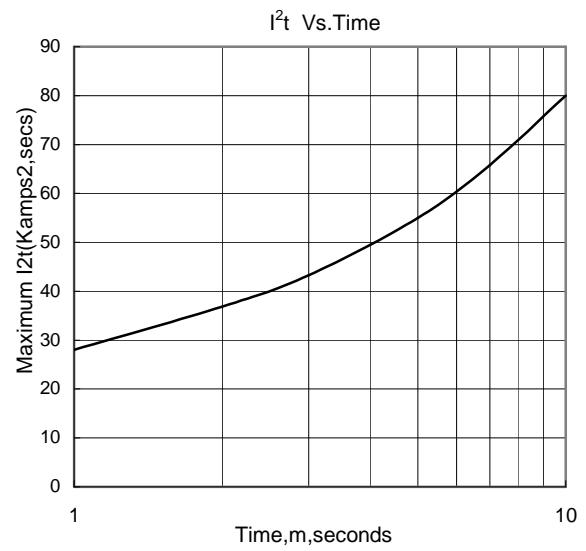
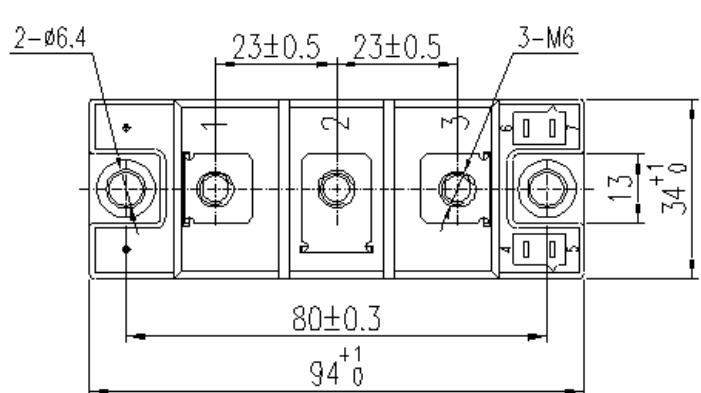
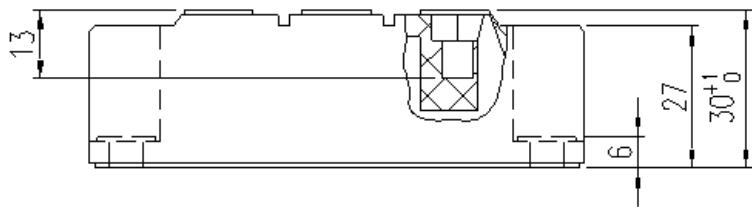
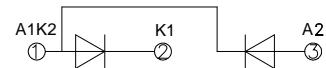


Fig8

**Outline:**

MDC

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