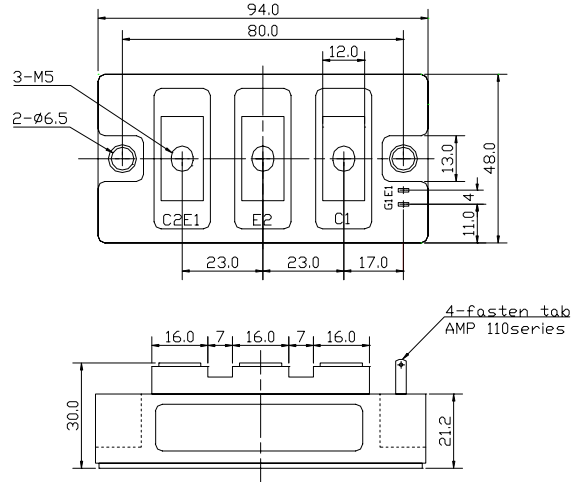
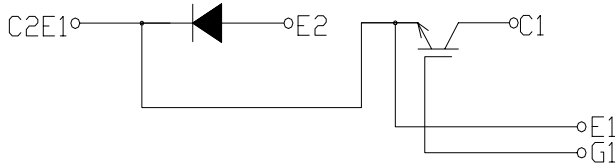


**回路図 : CIRCUIT**
**外形寸法図 : OUTLINE DRAWING**


Dimension: [mm]

**最大定格 : MAXIMUM RATINGS (T<sub>c</sub> = 25 )**

重量 : 320 g

Item	Symbol	Rated Value	Unit
コレクタ・エミッタ間電圧 Collector-Emitter Voltage	V <sub>CES</sub>	6 0 0	V
ゲート・エミッタ間電圧 Gate-Emitter Voltage	V <sub>GES</sub>	±2 0	V
コレクタ電流 Collector Current	DC	I <sub>c</sub> 2 0 0	A
	1 m s	I <sub>CP</sub> 4 0 0	
コレクタ損失 Collector Power Dissipation	P <sub>c</sub>	7 8 0	W
接合温度 Junction Temperature Range	T <sub>j</sub>	- 4 0 ~ + 1 5 0	
保存温度 Storage Temperature Range	T <sub>stg</sub>	- 4 0 ~ + 1 2 5	
絶縁耐圧 (Terminal to Base AC, 1minute) Isolation Voltage	V <sub>iso</sub>	2, 5 0 0	V (RMS)
締め付けトルク Mounting Torque	Module Base to Heatsink	3 ( 3 0 . 6 )	N · m (kgf · cm)
	Busbar to Main Terminal	2 ( 2 0 . 4 )	

**電気的特性 : ELECTRICAL CHARACTERISTICS (T<sub>c</sub> = 25 )**

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
コレクタ遮断電流 Collector-Emitter Cut-Off Current	I <sub>CES</sub>	V <sub>CE</sub> = 600V, V <sub>GE</sub> = 0V	-	-	2.0	mA
ゲート漏れ電流 Gate-Emitter Leakage Current	I <sub>GES</sub>	V <sub>GE</sub> = ±20V, V <sub>CE</sub> = 0V	-	-	1.0	μA
コレクタ・エミッタ間飽和電圧 Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> = 200A, V <sub>GE</sub> = 15V	-	2.1	2.6	V
ゲートしきい値電圧 Gate-Emitter Threshold Voltage	V <sub>GE(th)</sub>	V <sub>CE</sub> = 5V, I <sub>c</sub> = 200mA	4.0	-	8.0	V
入力容量 Input Capacitance	C <sub>ies</sub>	V <sub>CES</sub> = 10V, V <sub>GE</sub> = 0V, f = 1MHz	-	20,000	-	pF
スイッチング時間 Switching Time	上昇時間 Rise Time	V <sub>CC</sub> = 300V R <sub>L</sub> = 3Ω R <sub>G</sub> = 3.6Ω V <sub>GE</sub> = ±15V	-	0.15	0.30	μs
	ターンオン時間 Turn-on Time		-	0.25	0.40	
	下降時間 Fall Time		-	0.20	0.35	
	ターンオフ時間 Turn-off Time		-	0.45	0.70	

**フリーホイールダイオードの特性 : FREE WHEELING DIODE RATINGS & CHARACTERISTICS (T<sub>c</sub> = 25 )**

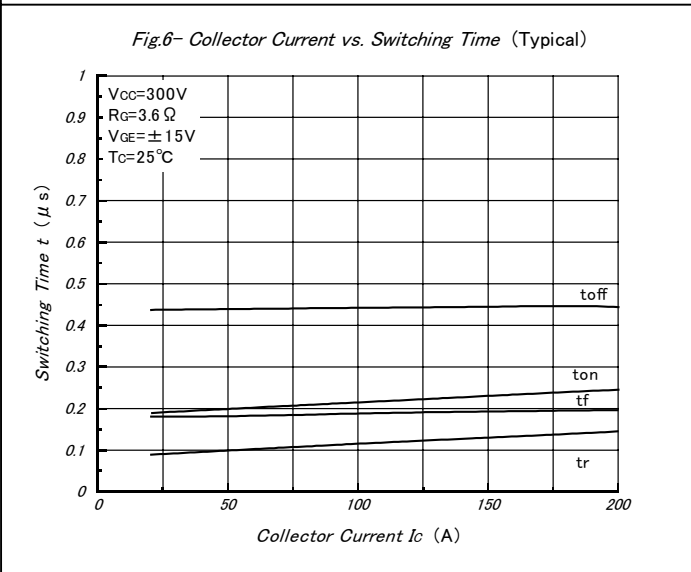
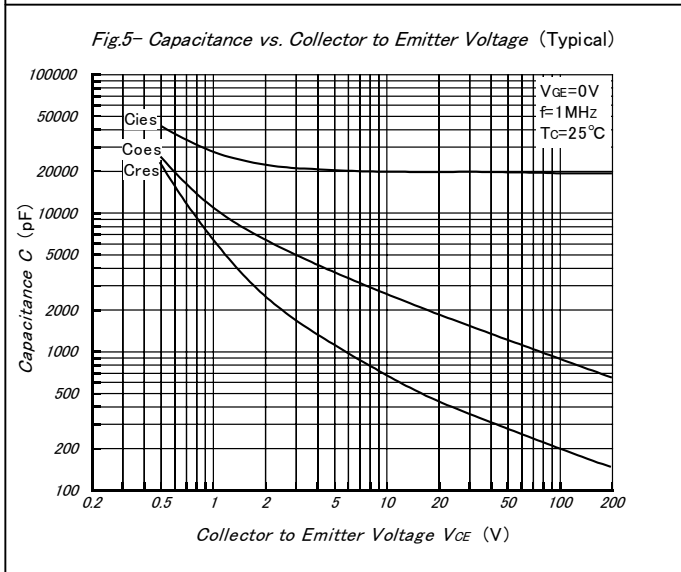
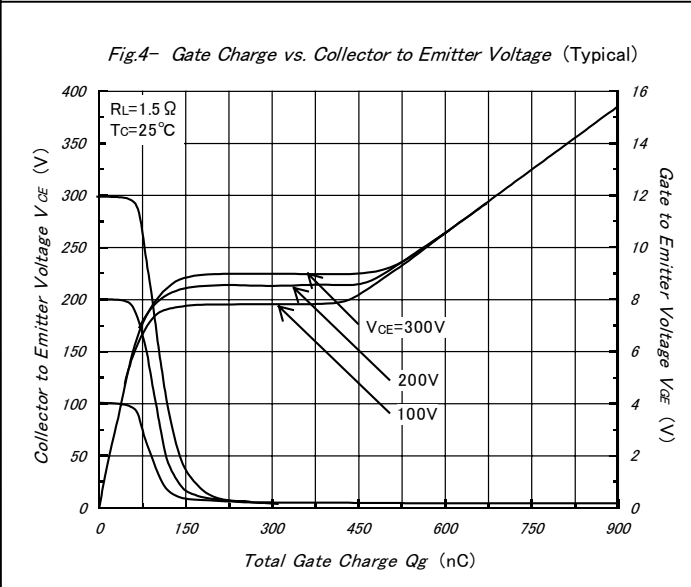
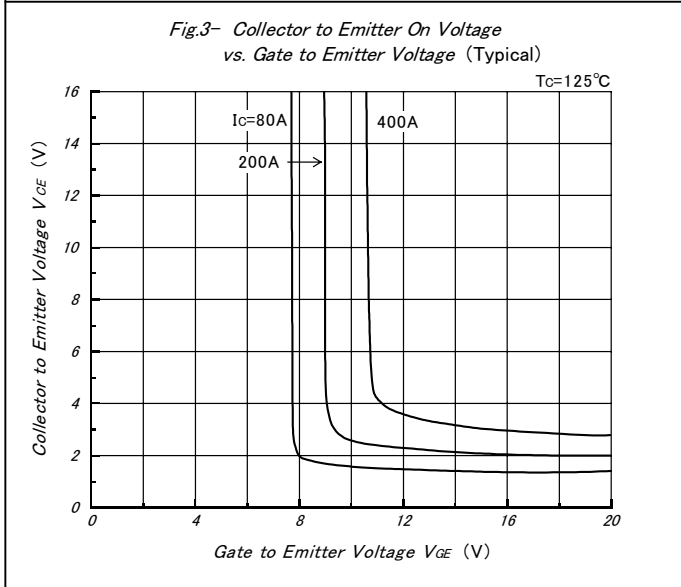
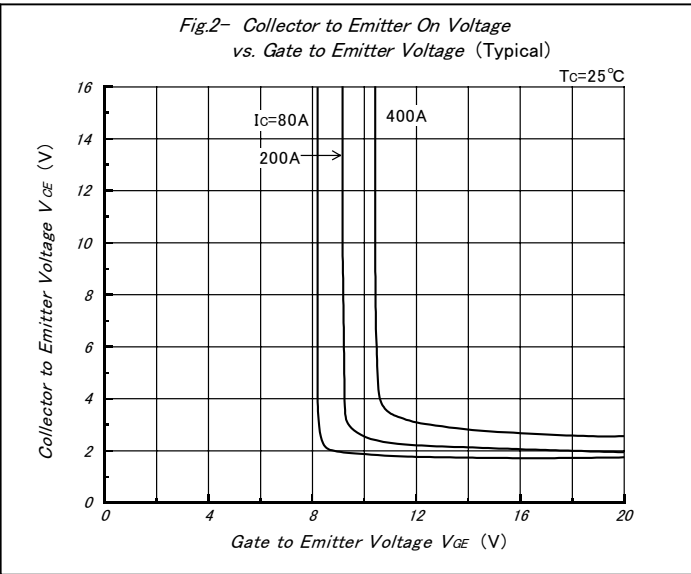
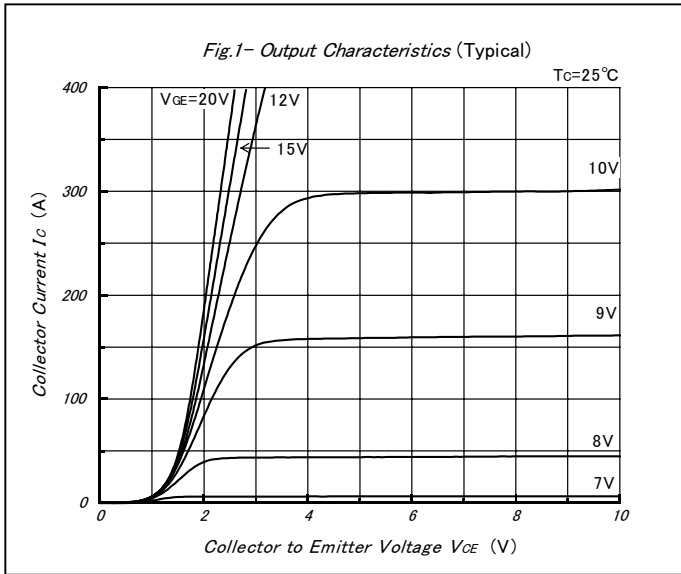
Item	Symbol	Rated Value	Unit
順電流 Forward Current	DC	I <sub>F</sub> 2 0 0	A
	1 m s	I <sub>FM</sub> 4 0 0	

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
順電圧 Peak Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 200A, V <sub>GE</sub> = 0V	-	1.9	2.4	V
逆回復時間 Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = 200A, V <sub>GE</sub> = -10V di/dt = 200A/μs	-	0.15	0.25	μs

**熱的特性 : THERMAL CHARACTERISTICS**

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
熱抵抗 Thermal Impedance	I G B T	Junction to Case	-	-	0.16	/ W
	Diode		-	-	0.38	

# PCHMB200A6



# PCHMB200A6

Fig.7- Series Gate Impedance vs. Switching Time (Typical)

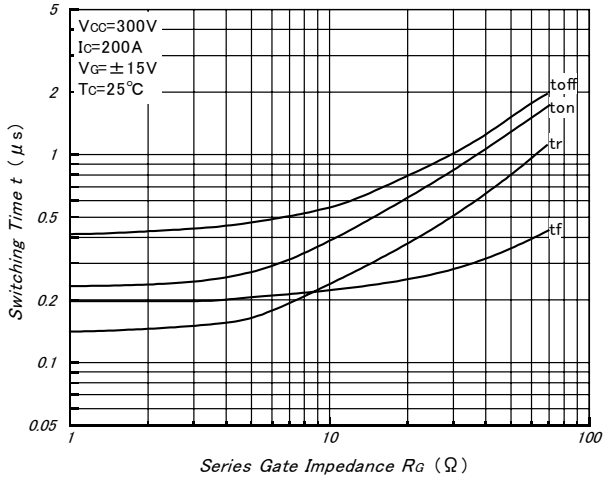


Fig.8- Forward Characteristics of Free Wheeling Diode (Typical)

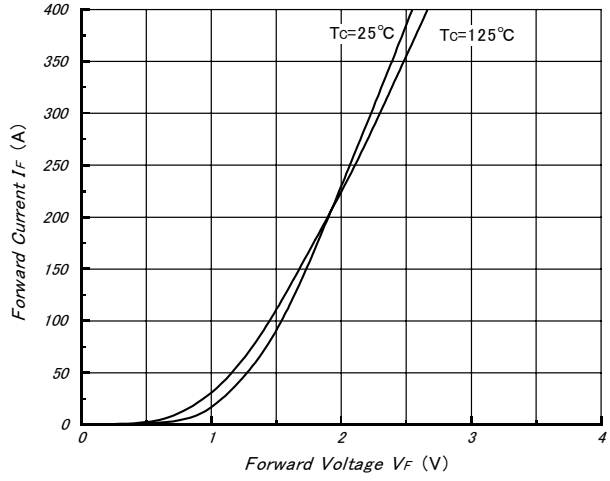


Fig.9- Reverse Recovery Characteristics (Typical)

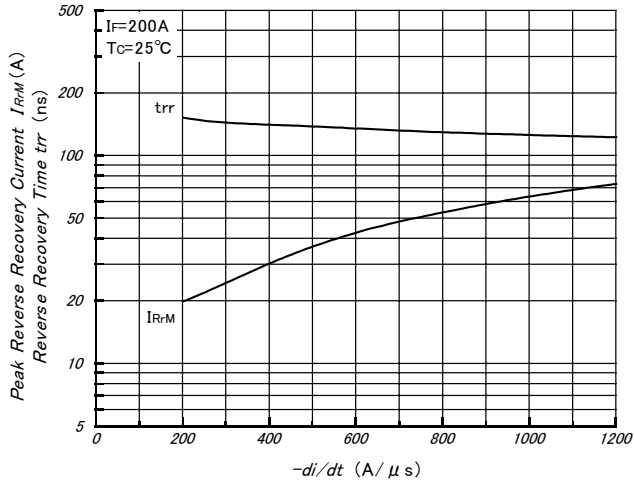


Fig.10- Reverse Bias Safe Operating Area (Typical)

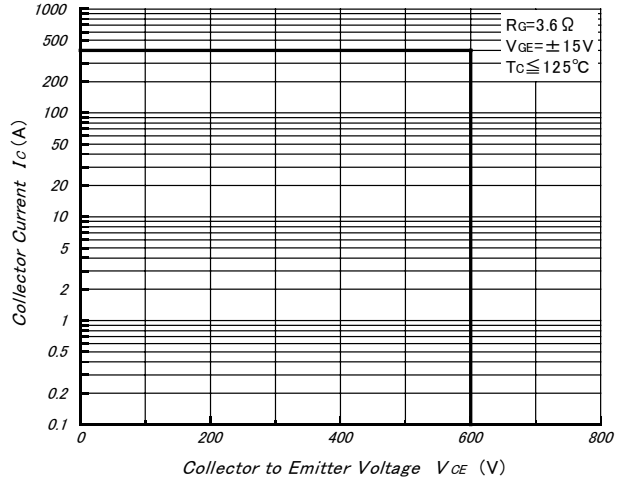


Fig.11- Transient Thermal Impedance

