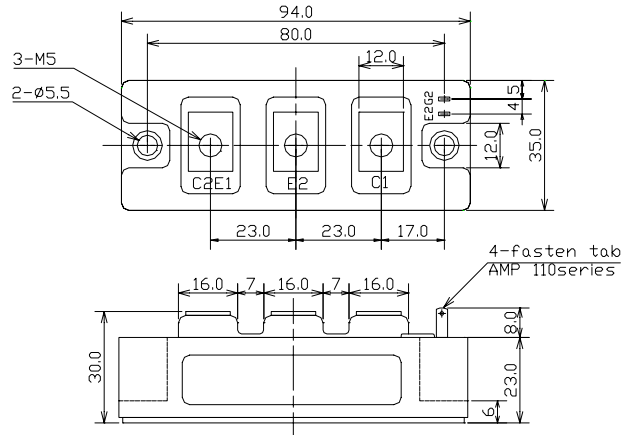
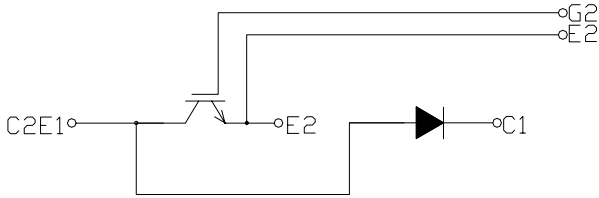


**回路図 : CIRCUIT**
**外形寸法図 : OUTLINE DRAWING**

Dimension: [mm]


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

重量 : 220g

Item	Symbol	Rated Value	Unit
コレクタ・エミッタ間電圧 Collector-Emitter Voltage	V <sub>CES</sub>	600	V
ゲート・エミッタ間電圧 Gate-Emitter Voltage	V <sub>GES</sub>	±20	V
コレクタ電流 Collector Current	I <sub>C</sub>	DC	150
		1ms	300
コレクタ損失 Collector Power Dissipation	P <sub>C</sub>	560	W
接合温度 Junction Temperature Range	T <sub>j</sub>	-40 ~ +150	
保存温度 Storage Temperature Range	T <sub>stg</sub>	-40 ~ +125	
絶縁耐圧(Terminal to Base AC,1minute) Isolation Voltage	V <sub>iso</sub>	2,500	V (RMS)
締め付けトルク Mounting Torque	F <sub>tor</sub>	Module Base to Heatsink	2 (20.4)
		Busbar to Main Terminal	

**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> = 150A, 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> = 150mA	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	-	15,000	-	pF	
スイッチング時間 Switching Time	上昇時間 Rise Time	t <sub>r</sub>	V <sub>CC</sub> = 300V R <sub>L</sub> = 2Ω R <sub>G</sub> = 5.1Ω V <sub>GE</sub> = ±15V	-	0.15	0.30	μs
	ターンオン時間 Turn-on Time	t <sub>on</sub>		-	0.25	0.40	
	下降時間 Fall Time	t <sub>f</sub>		-	0.20	0.35	
	ターンオフ時間 Turn-off Time	t <sub>off</sub>		-	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 )**

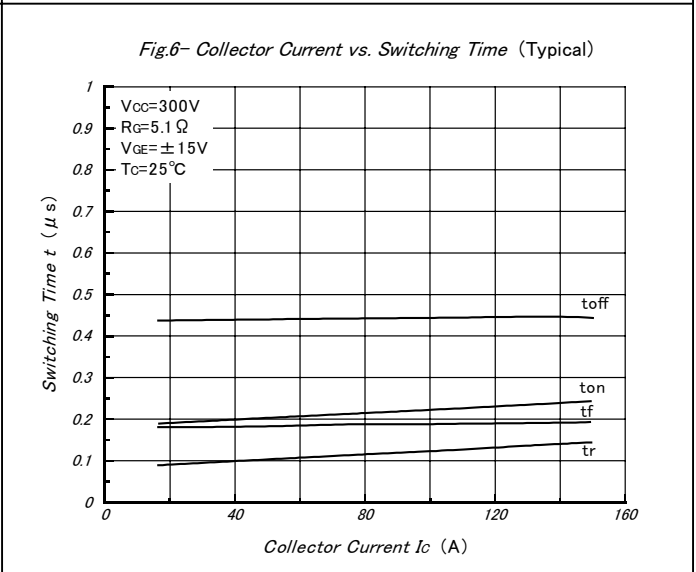
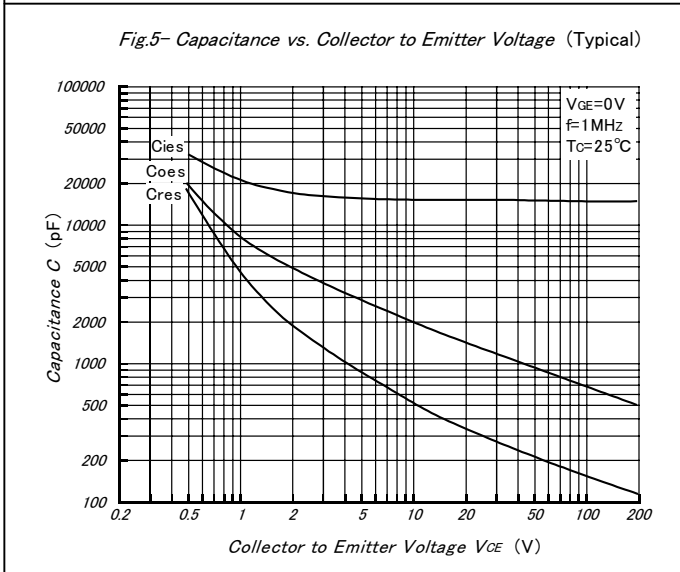
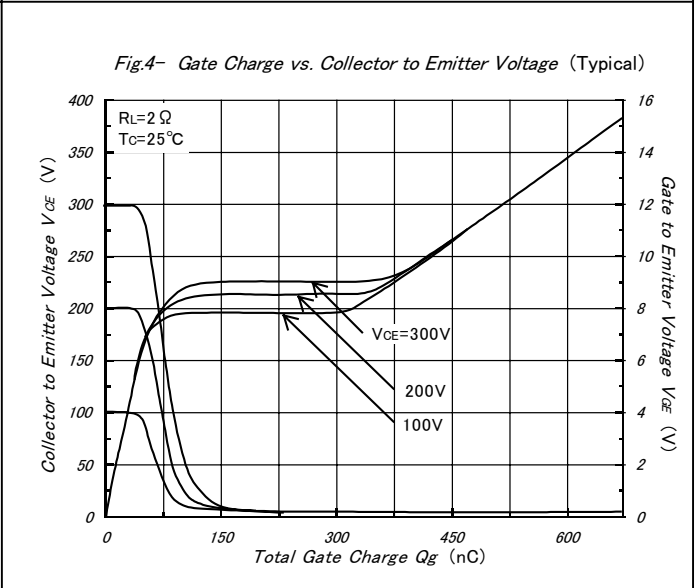
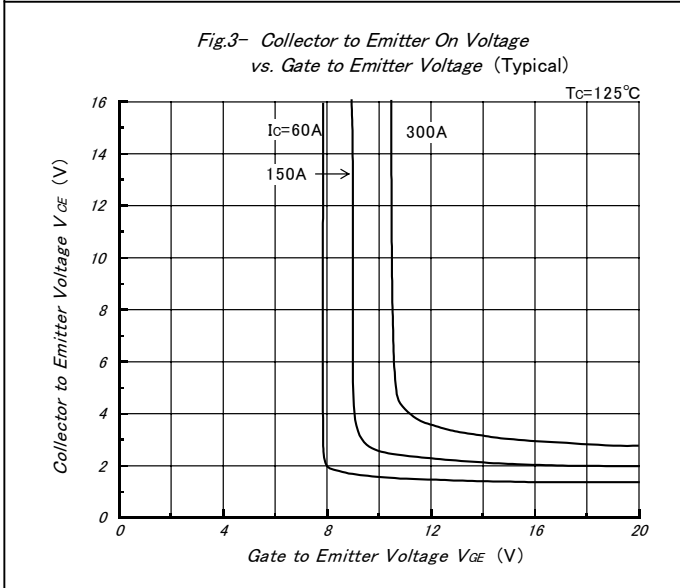
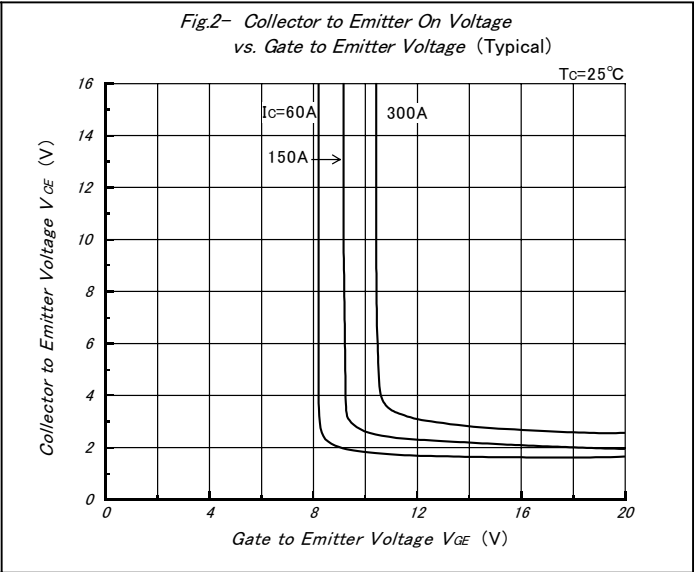
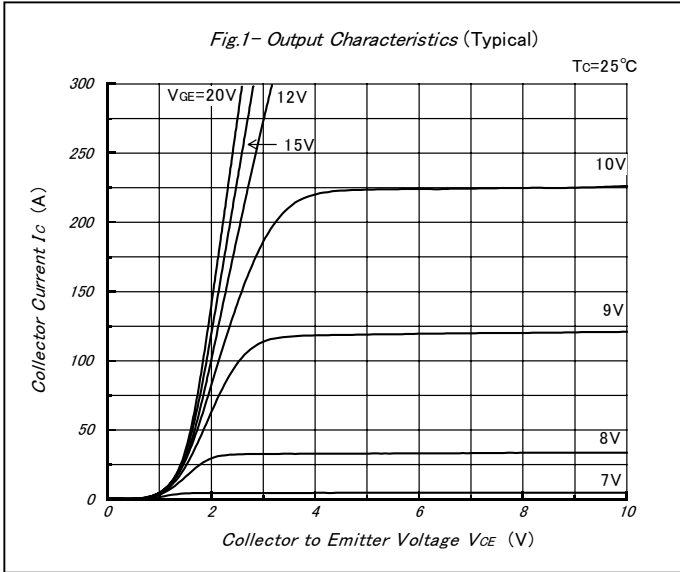
Item	Symbol	Rated Value	Unit
順電流 Forward Current	I <sub>F</sub>	DC	150
		1ms	300

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
順電圧 Peak Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 150A, 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> = 150A, V <sub>GE</sub> = -10V di/dt = 150A/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	R <sub>th(j-c)</sub>	IGBT	-	-	0.22	/W
		Diode	-	-	0.45	

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

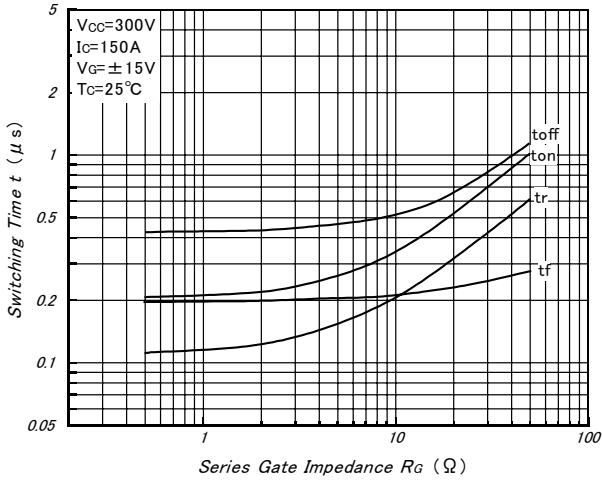


Fig.8- Forward Characteristics of Free Wheeling Diode (Typical)

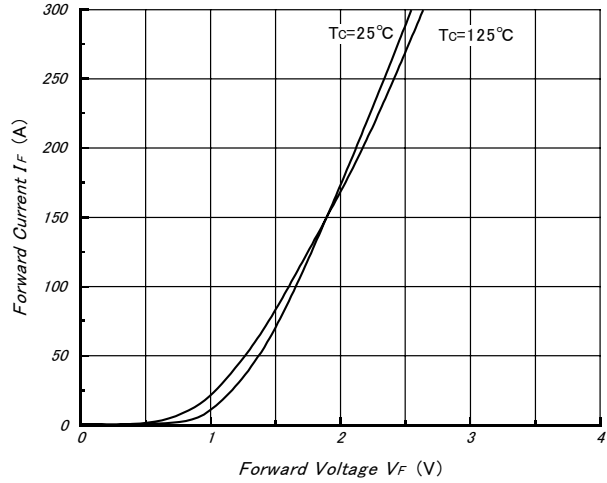


Fig.9- Reverse Recovery Characteristics (Typical)

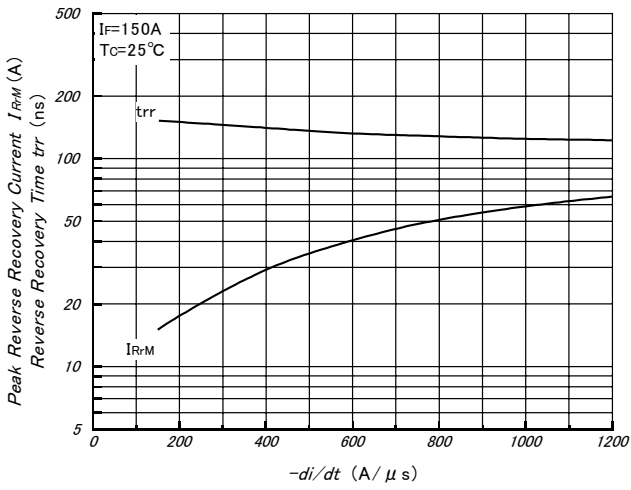


Fig.10- Reverse Bias Safe Operating Area (Typical)

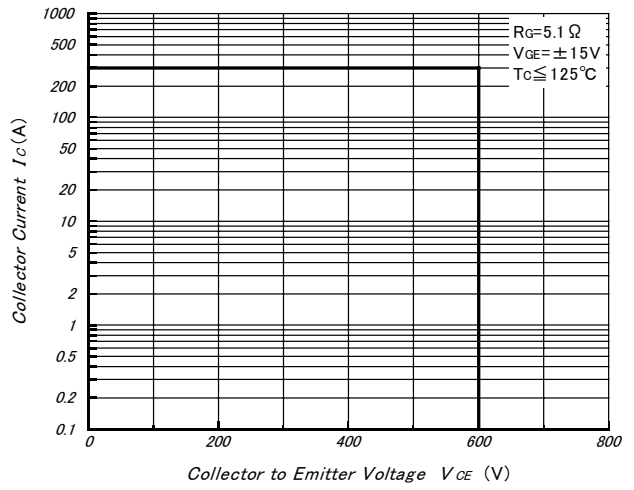


Fig.11- Transient Thermal Impedance

