

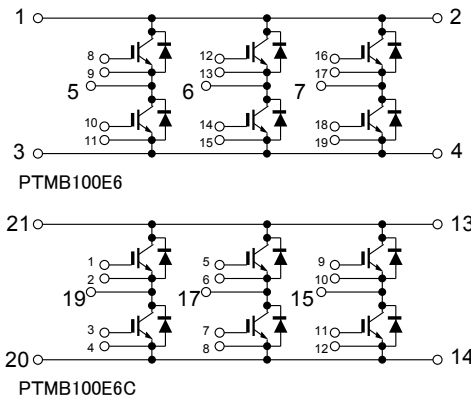
IGBT Module-Six Pack

100A, 600V

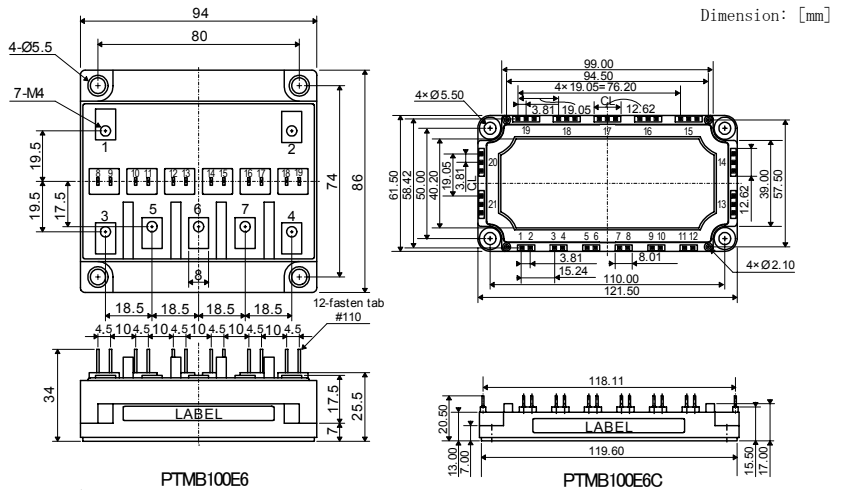
PTMB100E6

PTMB100E6C

□ 回路図 : *CIRCUIT*



□ 外形寸法図 : *OUTLINE DRAWING*



□ 最大定格 : *MAXIMUM RATINGS* (T_c=25°C)

Item	Symbol	Rated Value	Unit
コレクタ・エミッタ間電圧 Collector-Emitter Voltage	V _{CEs}	600	V
ゲート・エミッタ間電圧 Gate-Emitter Voltage	V _{GES}	±20	V
コレクタ電流 Collector Current	I _c	DC	100
		1ms	200
コレクタ損失 Collector Power Dissipation	P _c	400	W
接合温度 Junction Temperature Range	T _j	-40~+150	°C
保存温度 Storage Temperature Range	T _{stg}	-40~+125	°C
絶縁耐圧(Terminal to Base AC, 1minute) Isolation Voltage	V _{iso}	2,500	V _(RMS)
締め付けトルク Mounting Torque	Module Base to Heatsink	PTMB100E6	2 (20.4)
	Busbar to Main Terminal	PTMB100E6	1.4 (14.3)
		PDMB100E6C	2 (20.4)
			N·m (kgf·cm)

□ 電気的特性 : *ELECTRICAL CHARACTERISTICS* (T_c=25°C)

Characteristic	Symbol	Test Condition	Min.	Tvp.	Max.	Unit
コレクタ遮断電流 Collector-Emitter Cut-Off Current	I _{CEs}	V _{CE} =600V, V _{GE} =0V	-	-	1.0	mA
ゲート漏れ電流 Gate-Emitter Leakage Current	I _{GES}	V _{GE} =±20V, V _{CE} =0V	-	-	1.0	μA
コレクタ・エミッタ間飽和電圧 Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _c =100A, V _{GE} =15V	-	2.1	2.6	V
ゲートしきい値電圧 Gate-Emitter Threshold Voltage	V _{GE(th)}	V _{CE} =5V, I _c =100mA	4.0	-	8.0	V
入力容量 Input Capacitance	C _{ies}	V _{CE} =10V, V _{GE} =0V, f=1MHz	-	5,000	-	pF
スイッチング時間 Switching Time	上昇時間 Rise Time	V _{CC} =300V R _i =3.0Ω R _G =8.2Ω V _{GE} =±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		-	0.10	0.35	
	ターンオフ時間 Turn-off Time		-	0.35	0.70	

□ フリーホイールダイオードの特性 : *FREE WHEELING DIODE RATINGS & CHARACTERISTICS* (T_c=25°C)

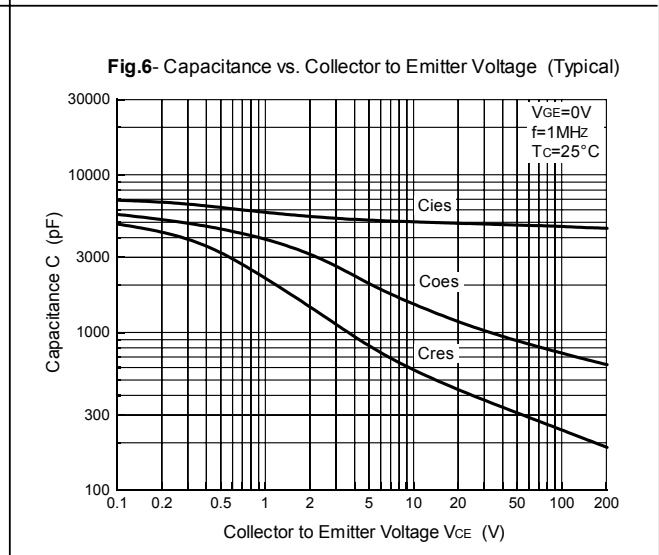
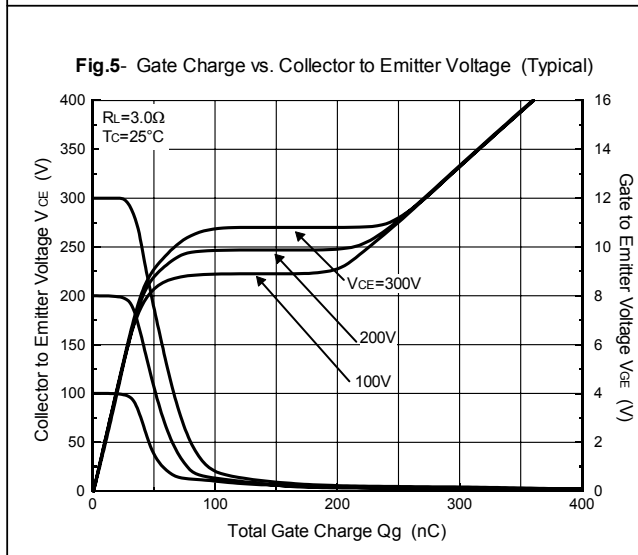
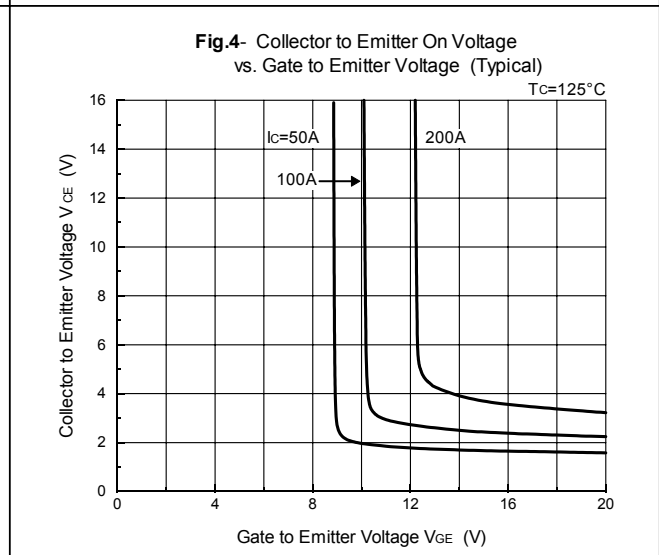
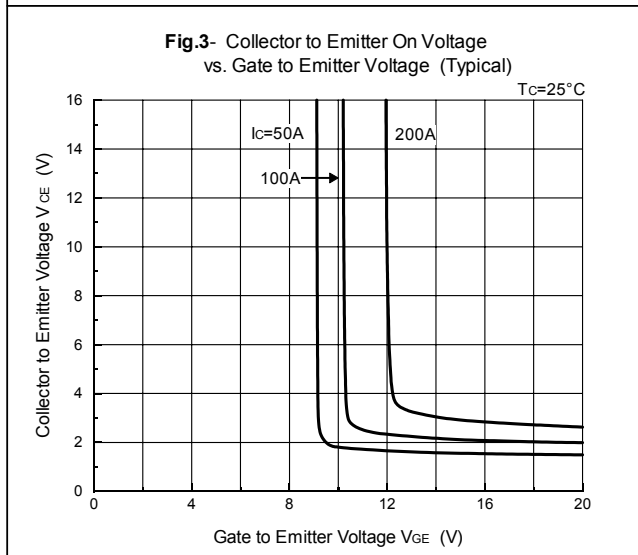
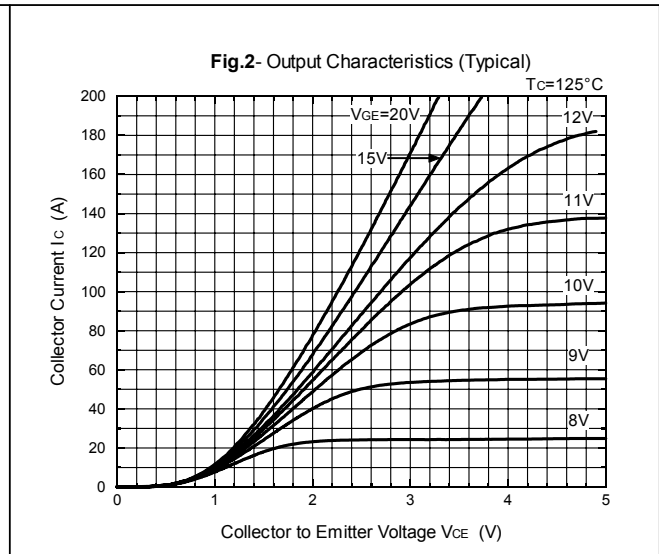
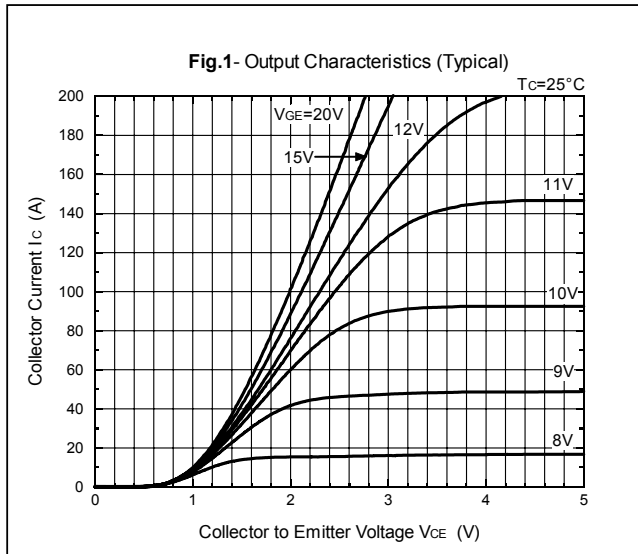
Item	Symbol	Rated Value	Unit			
順電流 Forward Current	DC	I _F	100			
	1ms	I _{FM}	200			
			A			
Characteristic	Symbol	Test Condition	Min.	Tvp.	Max.	Unit
順電圧 Peak Forward Voltage	V _F	I _F =100A, V _{GE} =0V	-	1.9	2.4	V
逆回復時間 Reverse Recovery Time	t _{rr}	I _F =100A, V _{GE} =-10V di/dt=200A/μs	-	0.15	0.25	μs

□ 熱的特性 : *THERMAL CHARACTERISTICS*

Characteristic	Symbol	Test Condition	Min.	Tvp.	Max.	Unit
熱抵抗 Thermal Impedance	IGBT	Junction to Case (T _c 測定点チップ直下)	-	-	0.31	°C/W
	Diode		-	-	0.65	

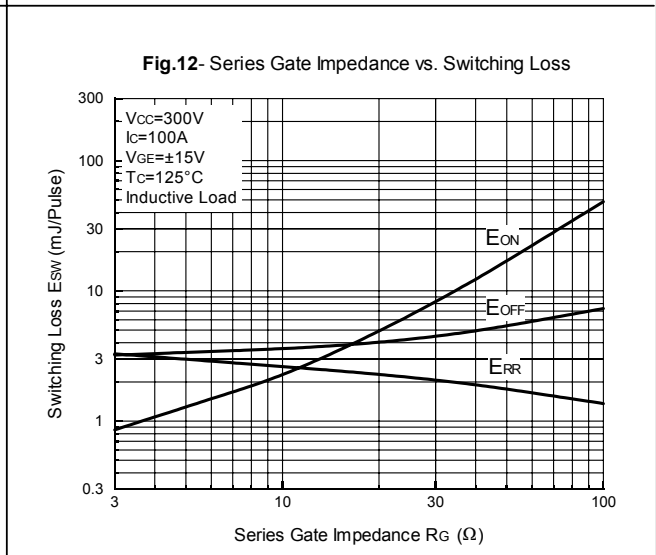
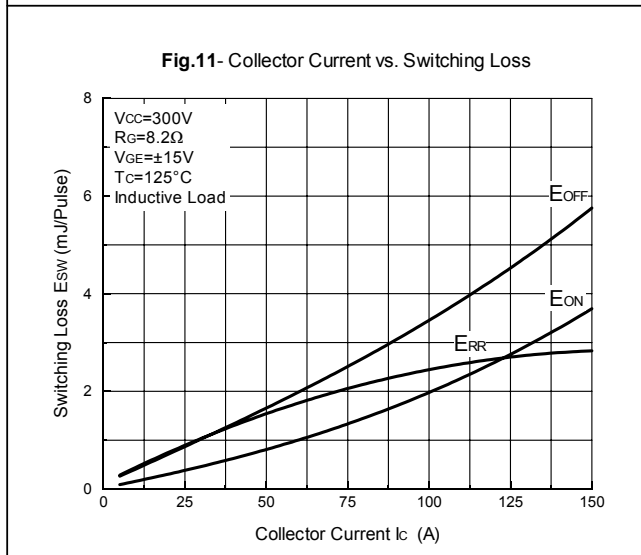
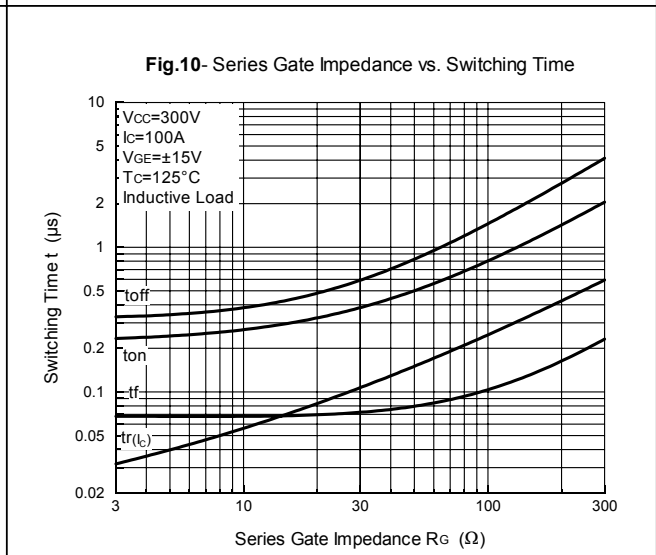
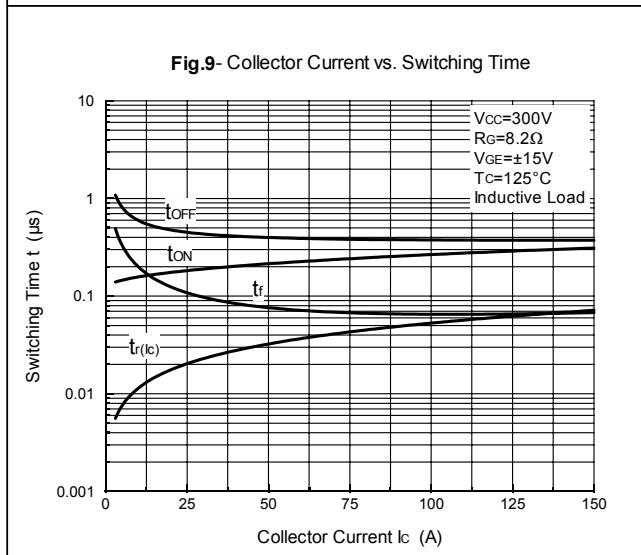
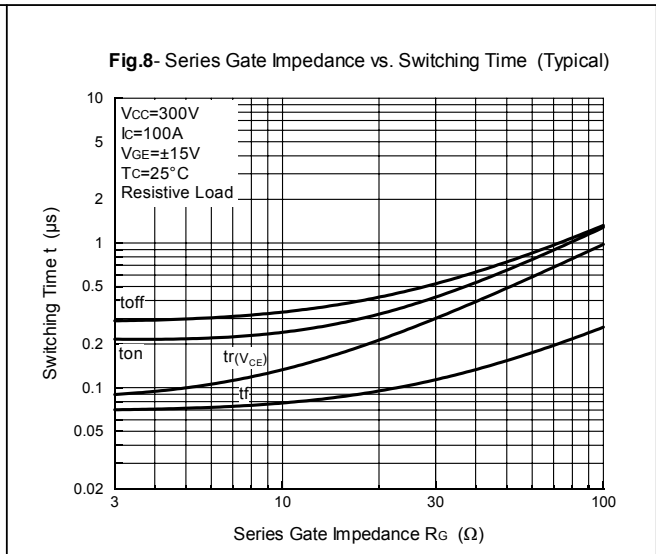
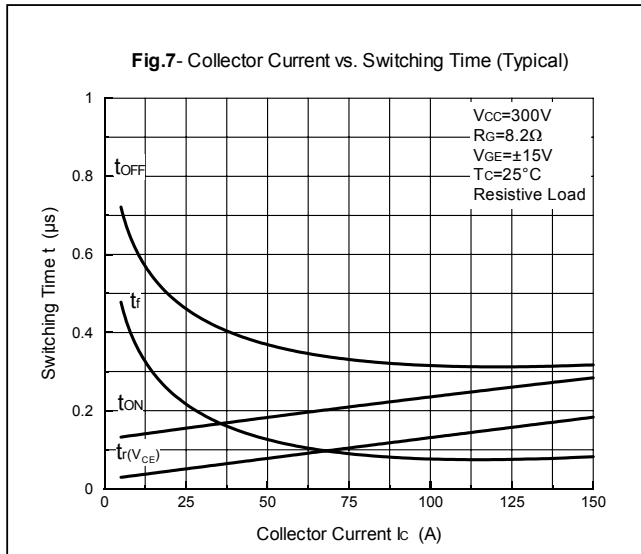
PTMB100E6

PTMB100E6C



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