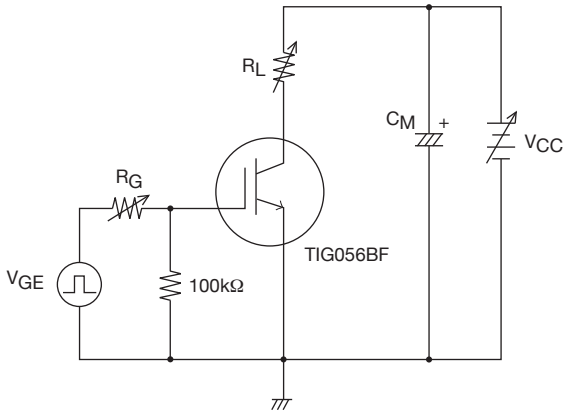
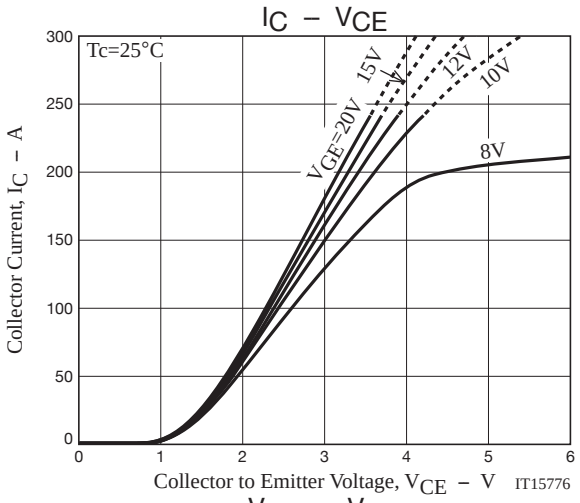
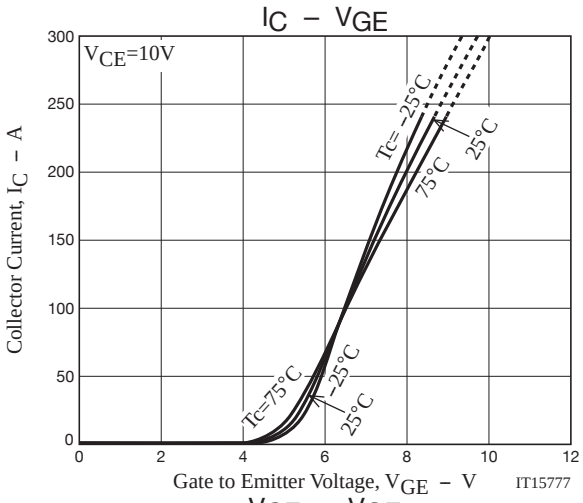
Electrical Characteristics at Ta=25°C

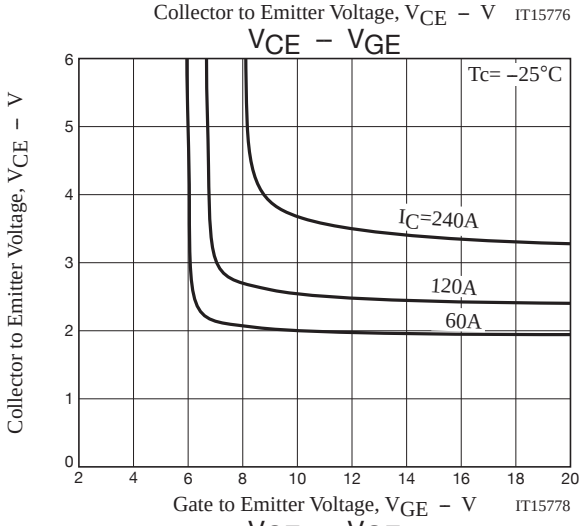
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector to Emitter Breakdown Voltage	$V_{(BR)CES}$	I_C=2mA, V_{GE}=0V	430			V
Collector to Emitter Cutoff Current	I_{CES}	V_{CE}=320V, V_{GE}=0V			100	μA
Gate to Emitter Leakage Current	I_{GES}	V_{GE}=±30V, V_{CE}=0V			±10	μA
Gate to Emitter Threshold Voltage	V_{GE}(off)	V_{CE}=10V, I_C=1mA	2.5		5.0	V
Collector to Emitter Saturation Voltage	V_{CE}(sat)	I_C=240A, V_{GE}=15V		3.6	5.0	V
Input Capacitance	Cies	V_{CE}=20V, f=1MHz		5500		pF
Output Capacitance	Coes			100		pF
Reverse Transfer Capacitance	Cres			70		pF
Turn-ON Delay Time	t_d(on)	V_{CE}=320V, I_C=240A, V_{GE}=15V, R_G=10Ω		46		ns
Rise Time	t_r			32		ns
Turn-OFF Delay Time	t_d(off)			140		ns
Fall Time	t_f			270		ns

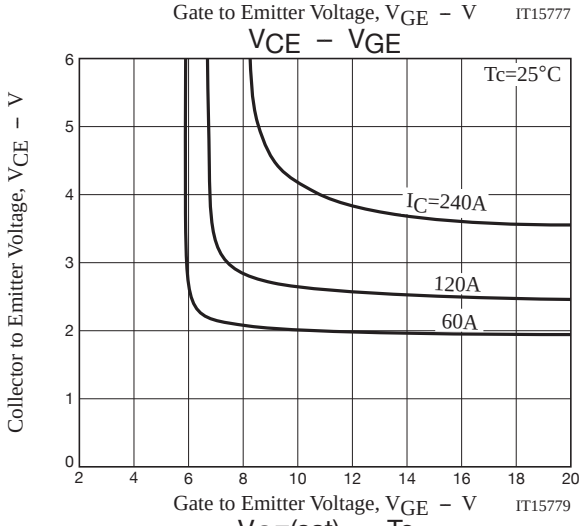
Fig1 Large Current R Load Switching Circuit

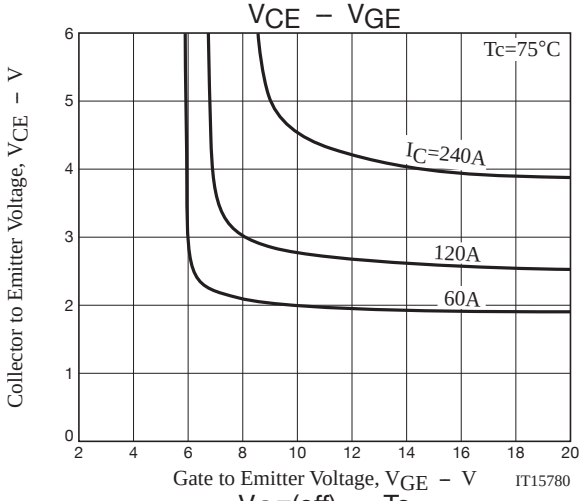


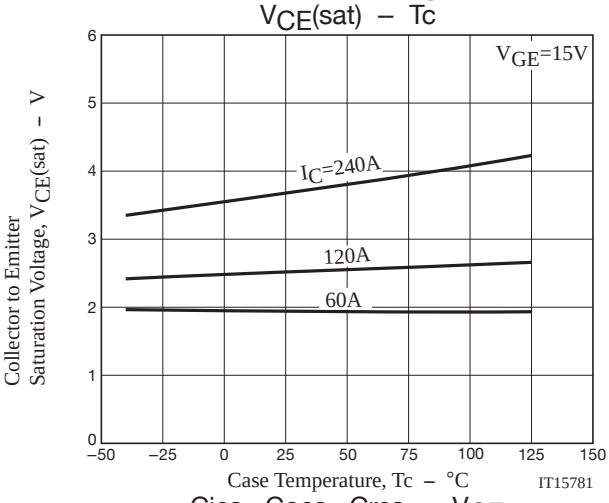


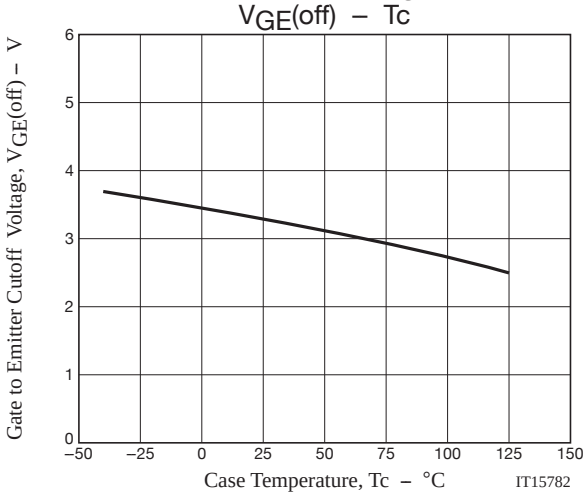


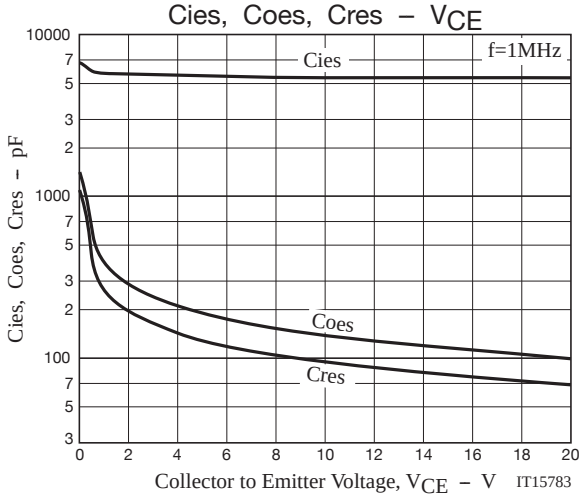




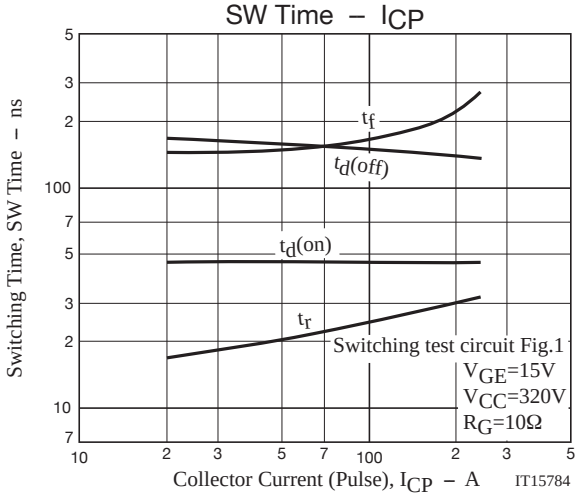




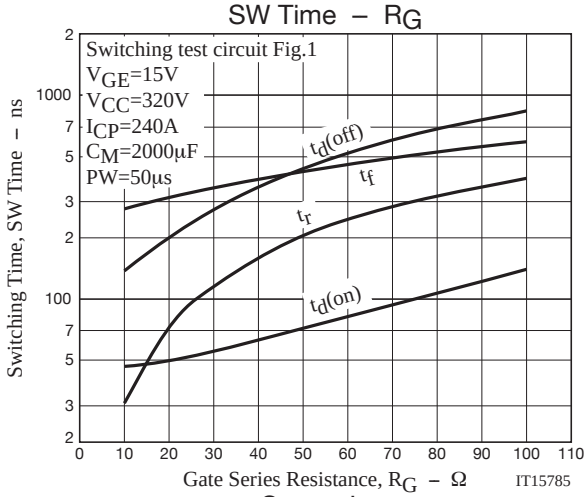




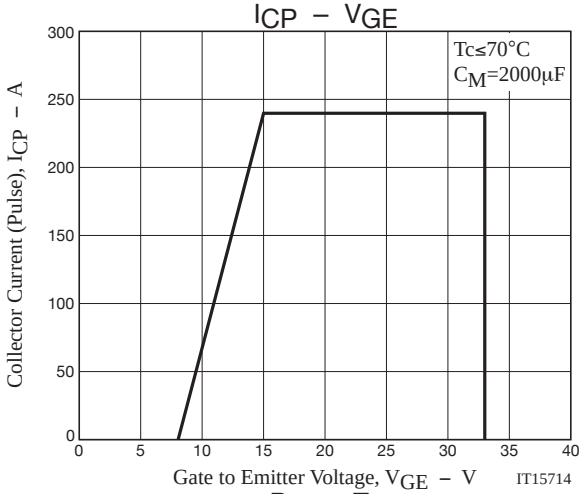
SW Time – I_{CP}



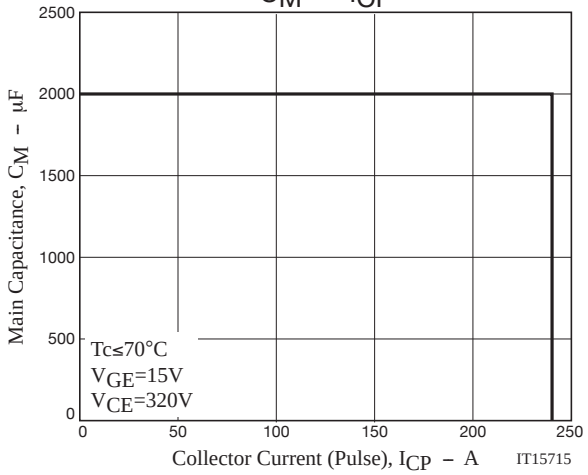
SW Time – R_G



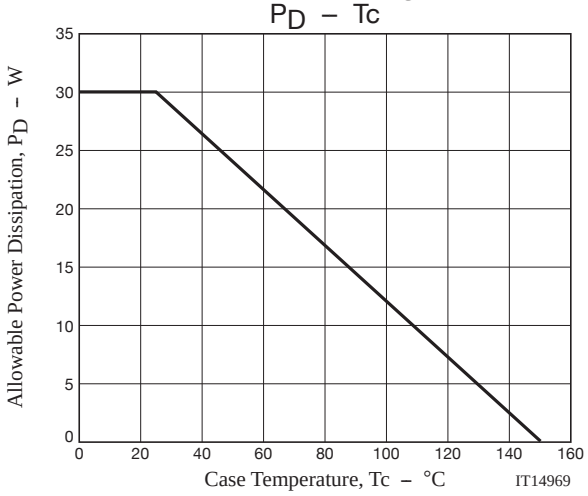
I_{CP} – V_{GE}



C_M – I_{CP}



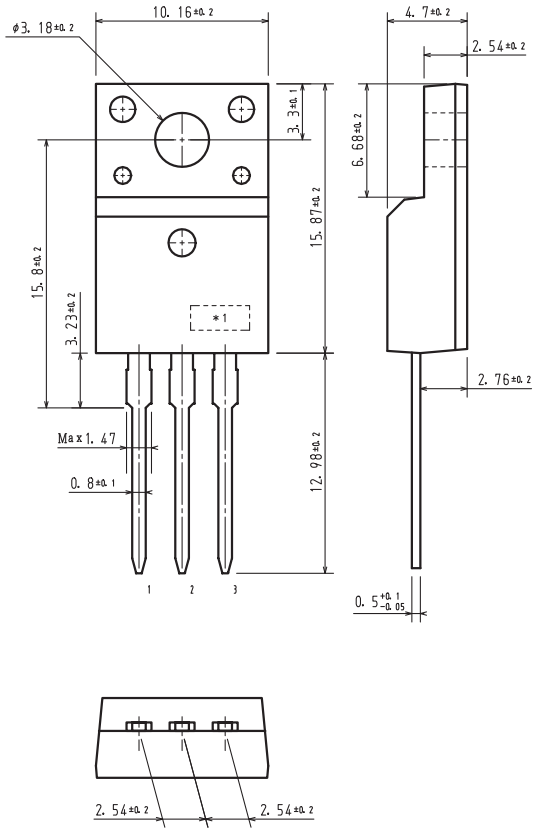
P_D – Tc



Outline Drawing

TIG056BF-1E

Mass (g)	Unit
1.8 * For reference	mm



Note on usage : TIG056BF has protection diode between gate and emitter but handling it requires sufficient care to be taken.