

2SC3852/3852A

Application : Driver for Solenoid and Motor, Series Regulator and General Purpose

■ Absolute maximum ratings (Ta=25°C)

Symbol	Ratings		Unit
	2SC3852	2SC3852A	
V _{CBO}	80	100	V
V _{CEO}	60	80	V
V _{EBO}	6		V
I _C	3		A
I _B	1		A
P _C	25(T _C =25°C)		W
T _j	150		°C
T _{stg}	-55 to +150		°C

■Electrical Characteristics

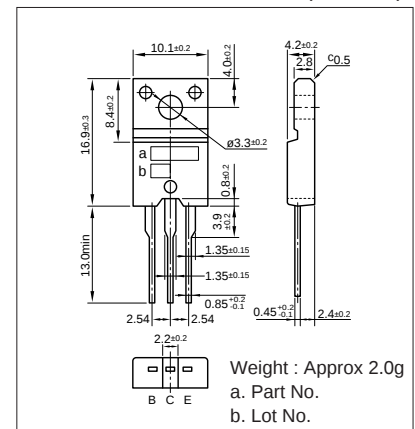
(Ta=25°C)

Symbol	Conditions	Ratings		Unit
		2SC3852	2SC3852A	
ICBO		10max		μA
	V _{CB} =	80	100	V
IEBO	V _{EB} =6V	100max		μA
V _(BR) CEO	I _C =25mA	60min	80min	V
h _{FE}	V _{CE} =4V, I _C =0.5A	500min		
V _{CE(sat)}	I _C =2A, I _B =50mA	0.5max		V
f _T	V _{CE} =12V, I _E =-0.2A	15typ		MHz
COB	V _{CB} =10V, f=1MHz	50typ		pF

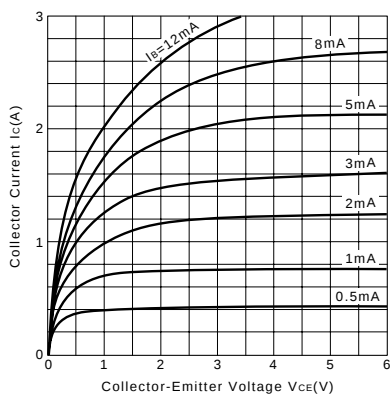
■ Typical Switching Characteristics (Common Emitter)

Vcc (V)	RL (Ω)	Ic (A)	VBB1 (V)	VBB2 (V)	IB1 (mA)	IB2 (mA)	ton (μs)	tstg (μs)	tf (μs)
20	20	1.0	10	-5	15	-30	0.8typ	3.0typ	1.2typ

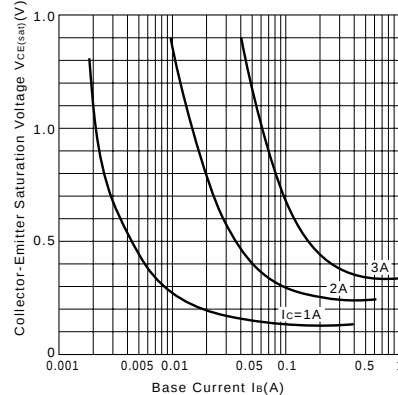
External Dimensions FM20(TO220F)



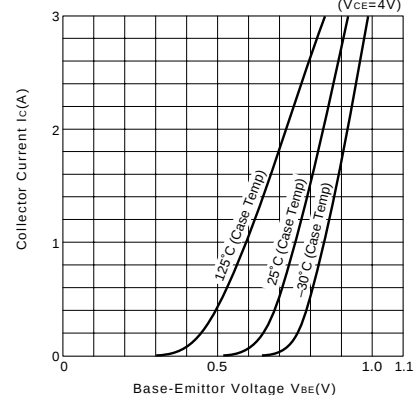
I_C-V_{CE} Characteristics (Typical)



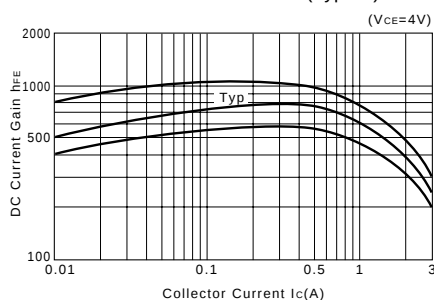
V_{CE(sat)}-I_B Characteristics (Typical)



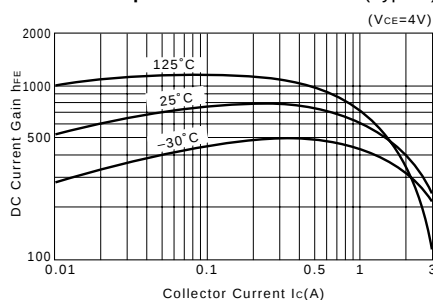
I_C-V_{BE} Temperature Characteristics (Typical)



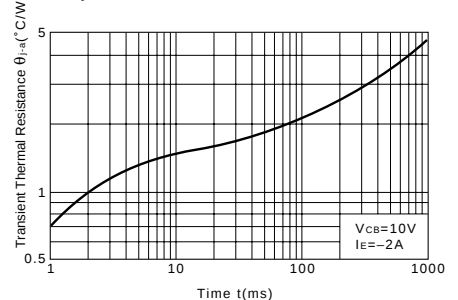
$h_{FE}-I_C$ Characteristics (Typical)



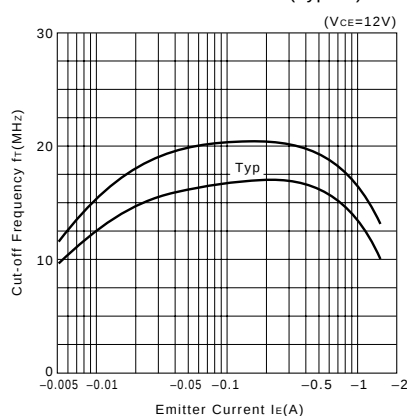
h_{FE} - I_C Temperature Characteristics (Typical)



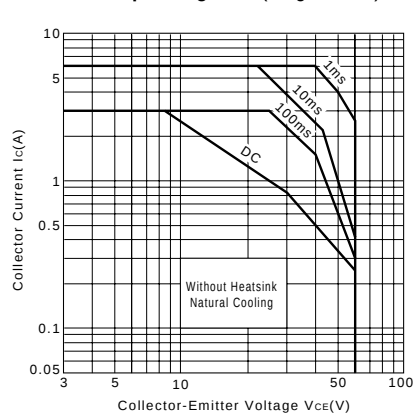
θ_{j-a-t} Characteristics



f_T-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc-Ta Derating

