

Power Transistor FP812

Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	-120	V
V _{CEO}	-120	V
V _{EB0}	-6	V
I _C	-8 (pulse -12)	A
I _B	-3	A
P _C	35 (T _C =25°C)	W
T _J	150	°C
T _{stg}	-55 to +150	°C

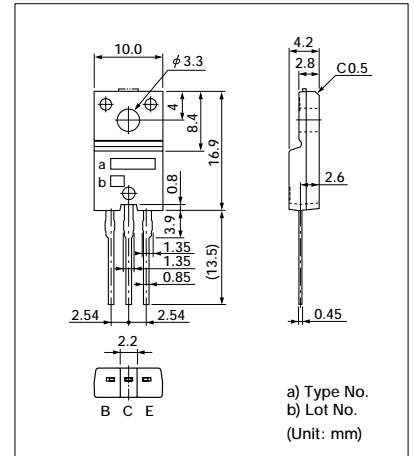
Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings	Unit
I _{CB0}	V _{CB} = -120V	10max	μA
I _{EB0}	V _{EB} = -6V	10max	μA
V _{CEO}	I _C = -50mA	-120min	V
h _{FE}	V _{CE} = -4V, I _C = -3A	70min	
V _{CE(sat)}	I _C = -3A, I _B = -0.3A	-0.3max	V

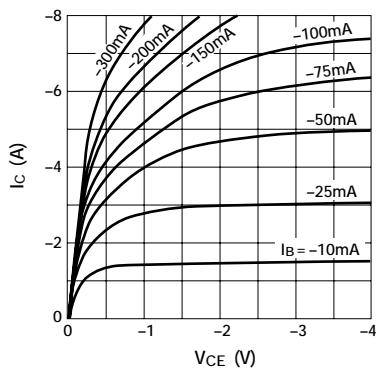
Typical Switching Characteristics

V _{CC} (V)	R _L (Ω)	I _C (A)	V _{BB1} (V)	V _{BB2} (V)	I _{B1} (mA)	I _{B2} (mA)	t _{on} (μs)	t _{stg} (μs)	t _f (μs)
12	4	3	-10	5	-30	30	2.5	0.4	0.6

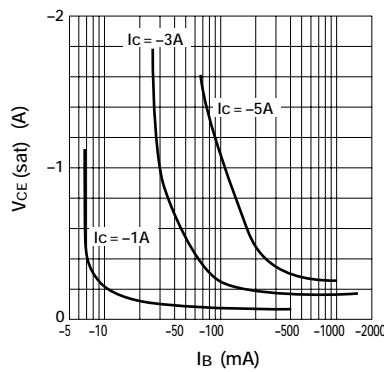
External Dimensions FM20 (full-mold)



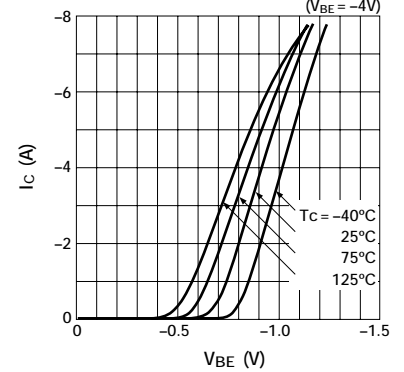
I_C — V_{CE} Characteristics (typ.)



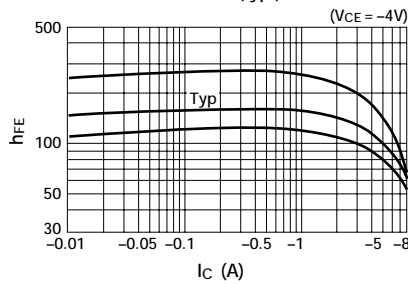
V_{CE(sat)} — I_B Characteristics (typ.)



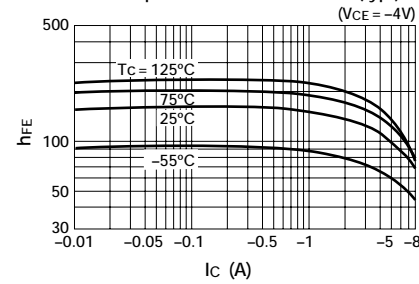
I_C — V_{BE} Temperature Characteristics (typ.)



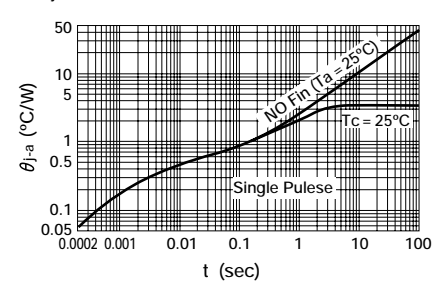
h_{FE} — I_C Characteristics (typ.)



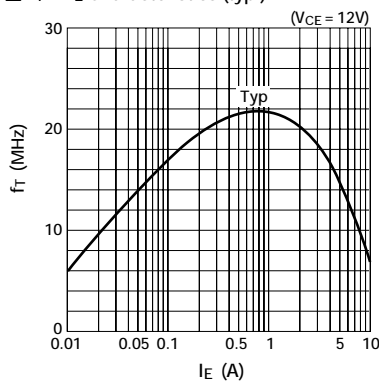
h_{FE} — I_C Temperature Characteristics (typ.)



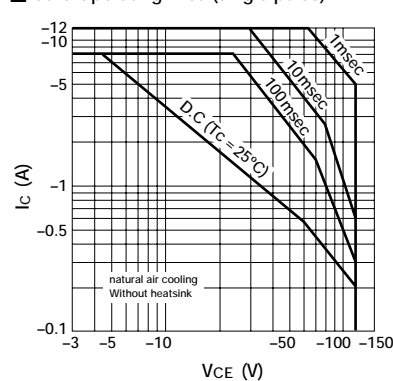
θ_{J-a} — t Characteristics



f_T — I_E Characteristics (typ.)



Safe Operating Area (single pulse)



P_C — T_a Derating

