

Power Transistor FN812

Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	120	V
V _{CE0}	100	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

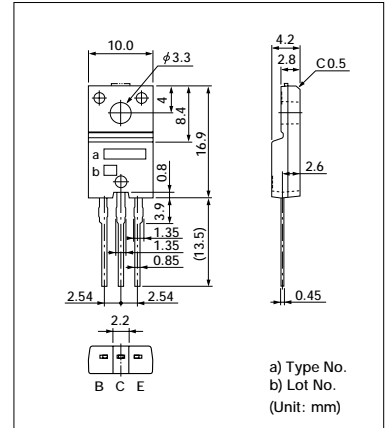
Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings	Unit
I _{cBO}	V _{CB} = 120V	10max	μA
I _{EBO}	V _{EB} = 6V	10max	μA
V _{CE0}	I _c = 50mA	100min	V
h _{FE}	V _{CE} = 4V, I _c = 3A	70min	
V _{CE(sat)}	I _c = 4A, I _B = 0.4A	0.3max	V

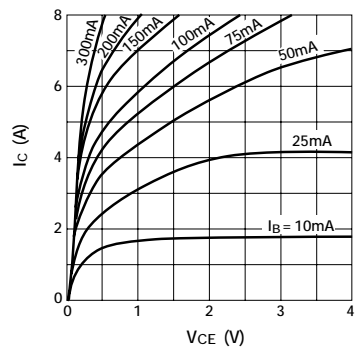
Typical Switching Characteristics

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	1.0	2.0	0.5

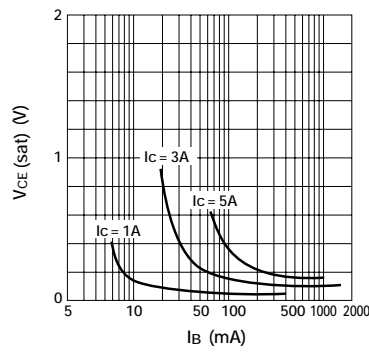
External Dimensions FM20 (full-mold)



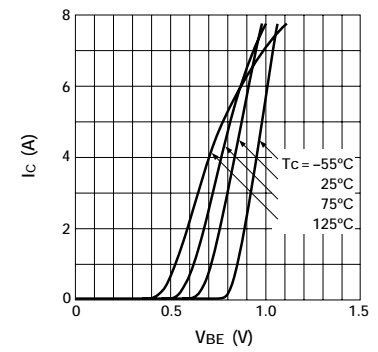
■ I_c — V_{CE} Characteristics (typ.)



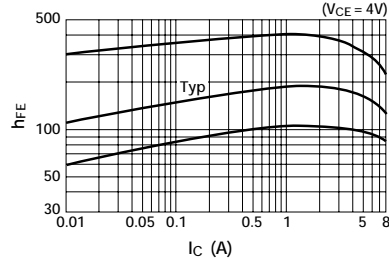
■ V_{CE(sat)} — I_B Characteristics (typ.)



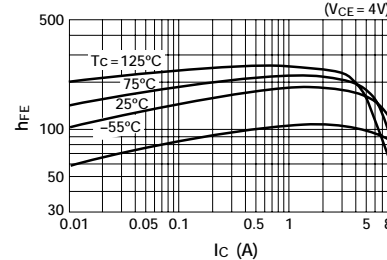
■ I_c — V_{BE} Temperature Characteristics (typ.)



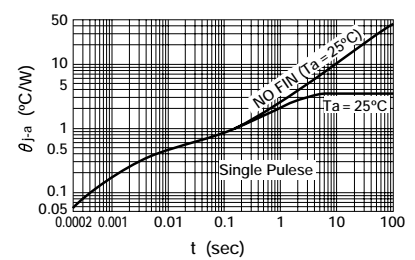
■ h_{FE} — I_c Characteristics (typ.)



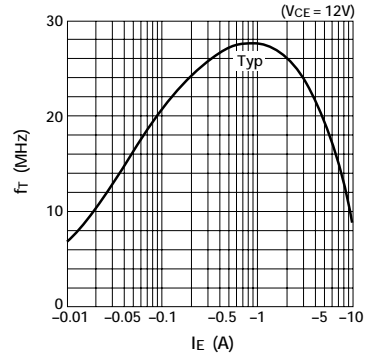
■ h_{FE} — I_c Temperature Characteristics (typ.)



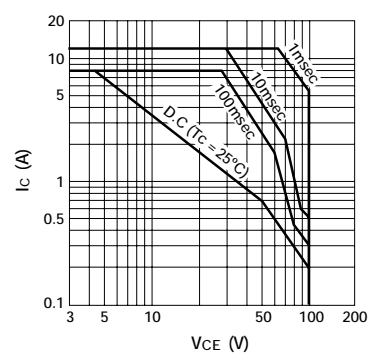
■ θ_{J-a} — t Characteristics



■ f_T — I_E Characteristics (typ.)



■ Safe Operating Area (single pulse)



■ P_C — T_a Derating

