

2SA1493

Silicon PNP Epitaxial Planar Transistor (Complement to type 2SC3857)

Application : Audio and General Purpose

■ Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	-200	V
V _{CEO}	-200	V
V _{EBO}	-6	V
I _c	-15	A
I _b	-5	A
P _c	150(T _c =25°C)	W
T _j	150	°C
T _{stg}	-55 to +150	°C

■ Electrical Characteristics (Ta=25°C)

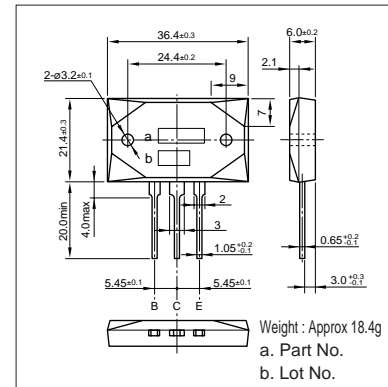
Symbol	Conditions	Ratings	Unit
I _{CB0}	V _{CB} =-200V	-100max	μA
I _{EBO}	V _{EB} =-6V	-100max	μA
V _{(BR)CEO}	I _c =-50mA	-200min	V
h _{FE}	V _{CE} =-4V, I _c =-5A	50min*	
V _{CE(sat)}	I _c =-10A, I _b =-1A	-3.0max	V
f _r	V _{CE} =-12V, I _E =0.5A	20typ	MHz
CoB	V _{CB} =-10V, f=1MHz	400typ	pF

*h_{FE} Rank \bar{O} (50to100), P(70to140), Y(90to180)

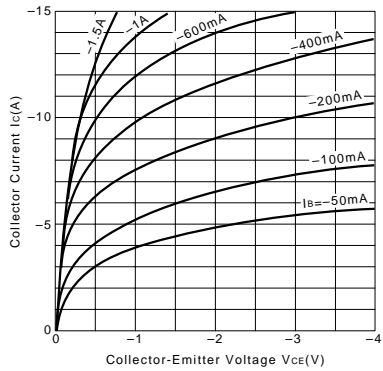
■ Typical Switching Characteristics (Common Emitter)

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)
-60	12	-5	-10	5	-500	500	0.3typ	0.9typ	0.2typ

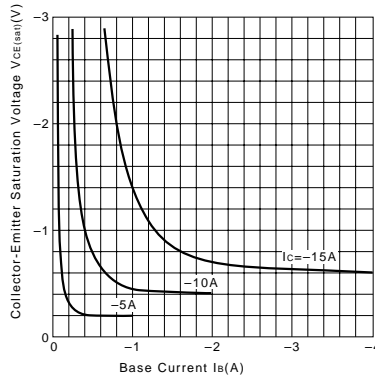
External Dimensions MT-200



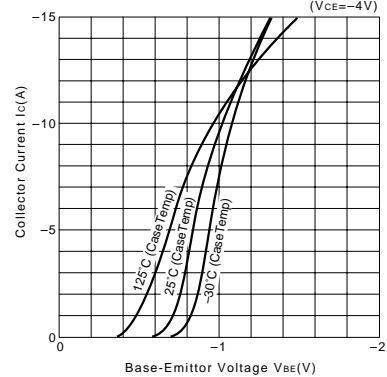
I_c-V_{CE} Characteristics (Typical)



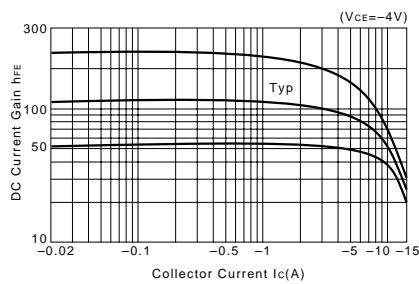
V_{CE(sat)}-I_b Characteristics (Typical)



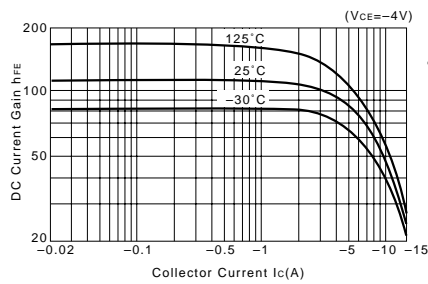
I_c-V_{BE} Temperature Characteristics (Typical)



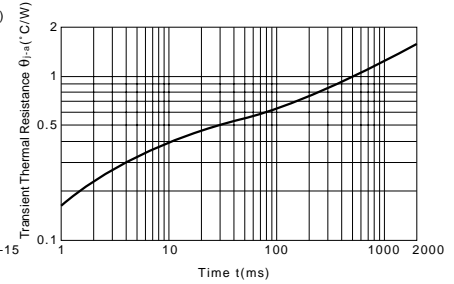
h_{FE}-I_c Characteristics (Typical)



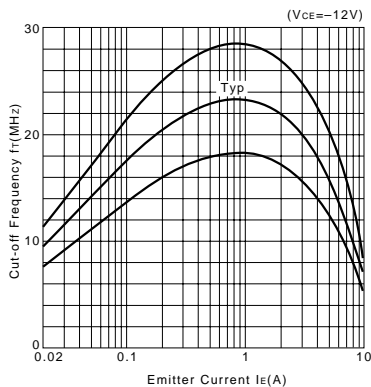
h_{FE}-I_c Temperature Characteristics (Typical)



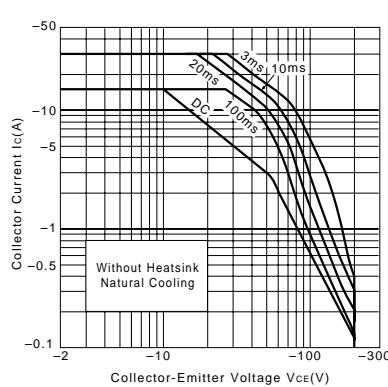
θ_{J-a}-t Characteristics



f_r-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



P_c-T_a Derating

