

High hFE Low VCE (sat)

2SC4495

Silicon NPN Triple Diffused Planar Transistor

Application : Audio Temperature Compensation and General Purpose

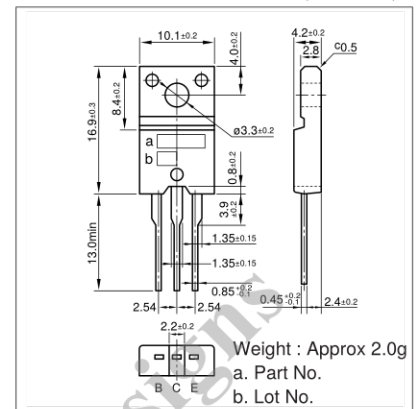
Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	80	V
V _{CE0}	50	V
V _{EB0}	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
I _{CB0}	V _{CB} =80V	10max	μA
I _{EB0}	V _{EB} =6V	10max	μA
V _{(BR)CEO}	I _c =25mA	50min	V
h _{FE}	V _{CE} =4V, I _c =0.5A	500min	
V _{CE(sat)}	I _c =1A, I _B =20mA	0.5max	V
f _T	V _{CE} =12V, I _E =-0.1A	40typ	MHz
COB	V _{CB} =10V, f=1MHz	30typ	pF

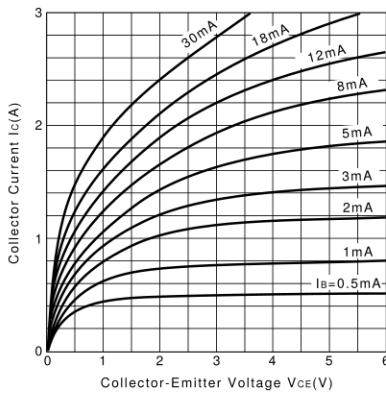
External Dimensions FM20(TO220F)



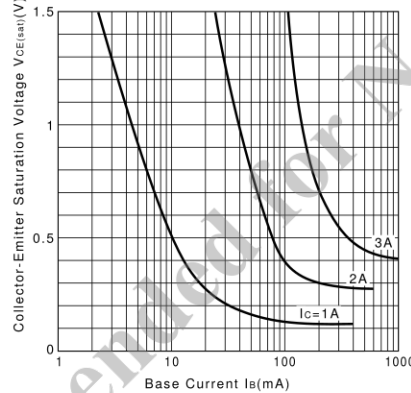
Typical Switching Characteristics (Common Emitter)

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)
20	20	1	10	-5	15	-30	0.45typ	1.60typ	0.85typ

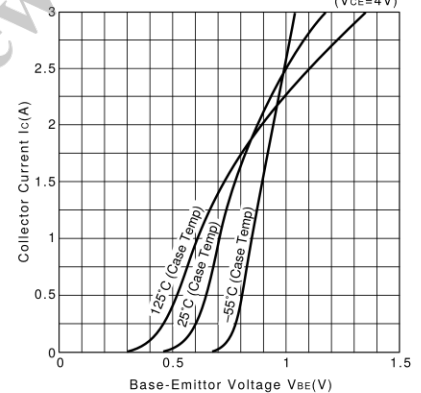
I_c-V_{CE} Characteristics (Typical)



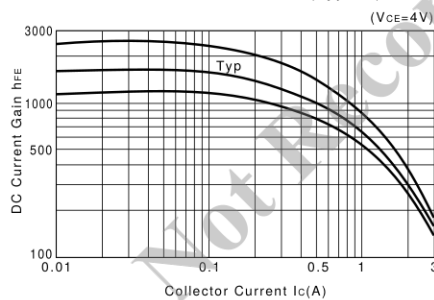
V_{CE(sat)}-I_B Characteristics (Typical)



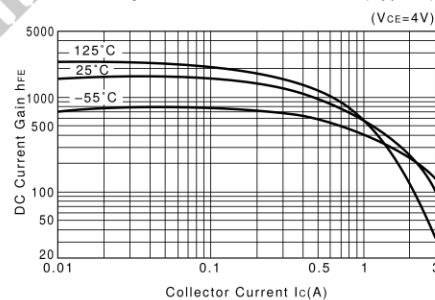
I_c-V_{BE} Temperature Characteristics (Typical)



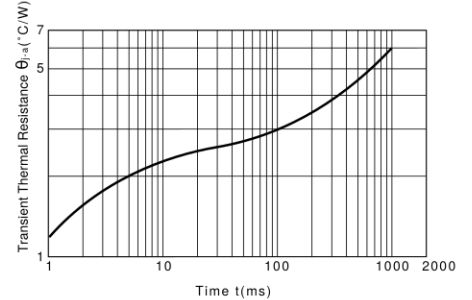
h_{FE}-I_c Characteristics (Typical)



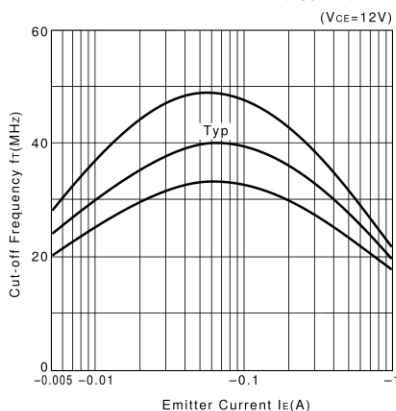
h_{FE}-I_c Temperature Characteristics (Typical)



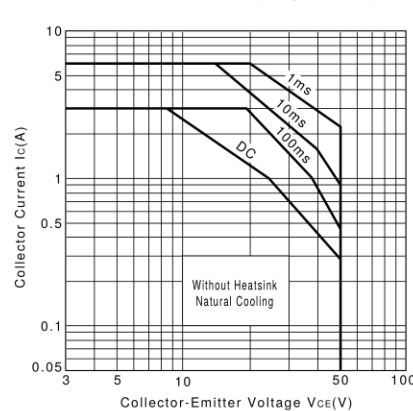
θ_{J-a}-t Characteristics



f_T-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



P_c-T_a Derating

