

High h_{FE}
Low $V_{CE(sat)}$

2SC4495

Silicon NPN Triple Diffused Planar Transistor

Application : Audio Temperature Compensation and General Purpose

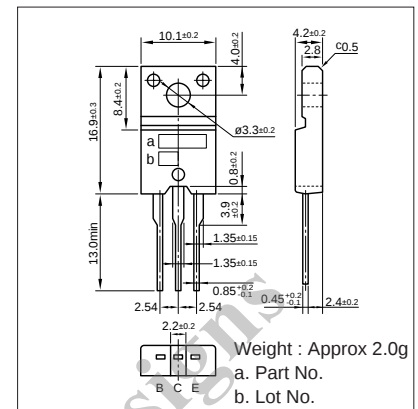
Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V_{CBO}	80	V
V_{CEO}	50	V
V_{EBO}	6	V
I_C	3	A
I_B	1	A
P_C	25 (Tc=25°C)	W
T_j	150	°C
T_{stg}	-55 to +150	°C

Electrical Characteristics (Ta=25°C)

Symbol	Conditions	Ratings	Unit
I_{CBO}	$V_{CB}=80V$	10max	μA
I_{EBO}	$V_{EB}=6V$	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_r	$V_{CE}=12V, I_E=-0.1A$	40typ	MHz
COB	$V_{CB}=10V, f=1MHz$	30typ	pF

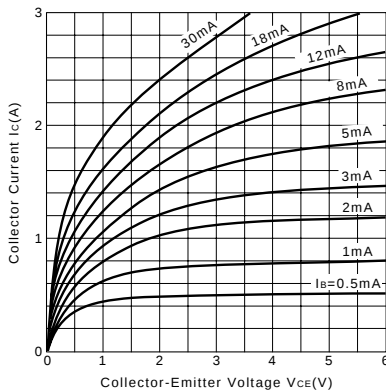
External Dimensions FM20(TO220F)



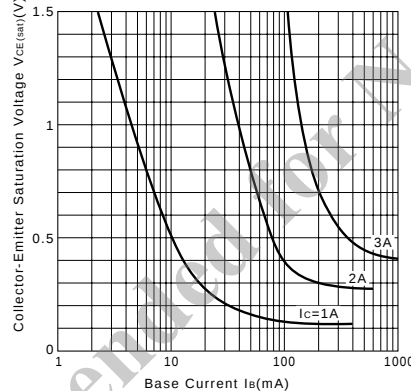
Typical Switching Characteristics (Common Emitter)

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

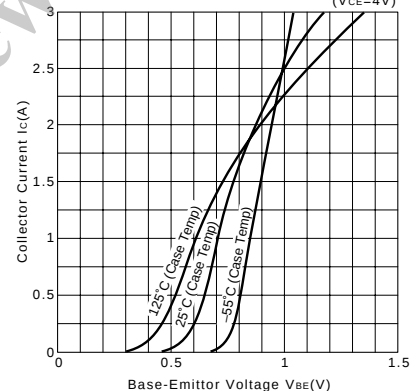
I_C-V_{CE} Characteristics (Typical)



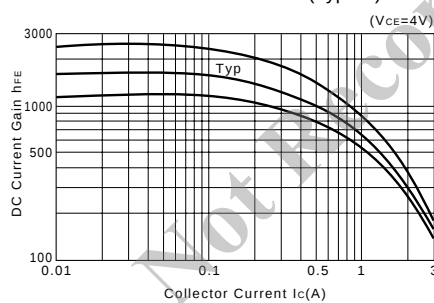
$V_{CE(sat)}-I_B$ Characteristics (Typical)



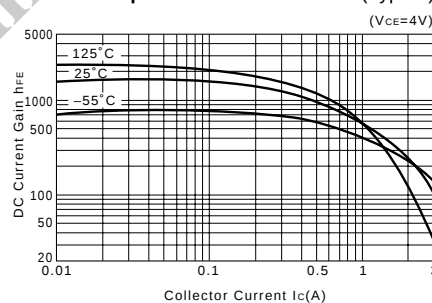
I_C-V_{BE} Temperature Characteristics (Typical)



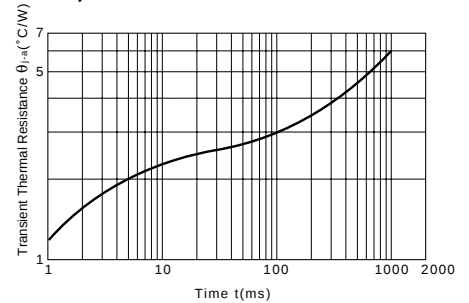
$h_{FE}-I_C$ Characteristics (Typical)



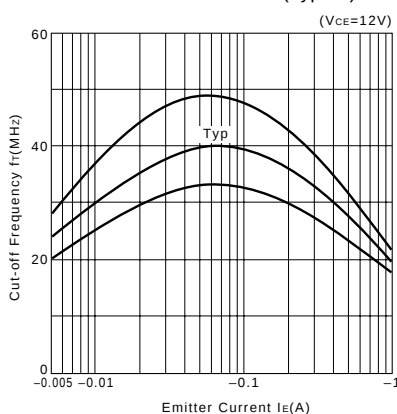
$h_{FE}-I_C$ Temperature Characteristics (Typical)



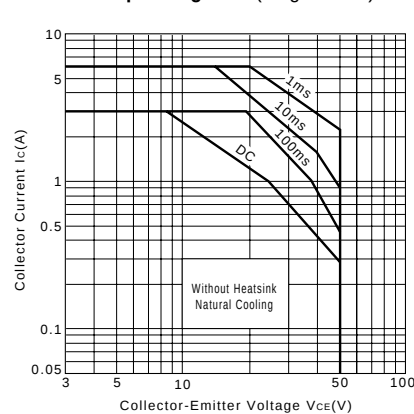
$\theta_{JA}-t$ Characteristics



f_T-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



P_C-T_a Derating

