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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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2SC4304

Silicon NPN Triple Diffused Planar Transistor (High Voltage High Speed Switching Transistor)

Application : Switching Regulator and General Purpose

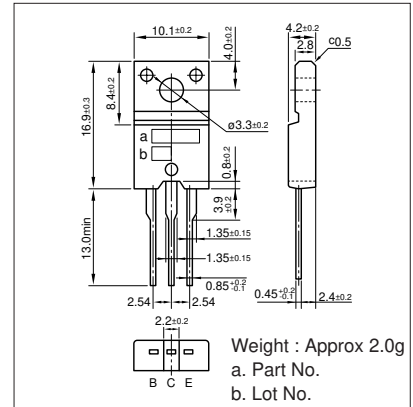
■ Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	900	V
V _{CEO}	800	V
V _{EB0}	7	V
I _c	3(Pulse6)	A
I _B	1.5	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	Conditions	Ratings	Unit
I _{CB0}	V _{CB} =800V	100max	μA
I _{EB0}	V _{EB} =7V	100max	μA
V _{(BR)CEO}	I _c =10mA	800min	V
h _{FE}	V _{CE} =4V, I _c =0.7A	10 to 30	
V _{CE(sat)}	I _c =0.7A, I _B =0.14A	0.5max	V
V _{BE(sat)}	I _c =0.7A, I _B =0.14A	1.2max	V
f _r	V _{CE} =12V, I _E =-0.3A	15typ	MHz
COB	V _{CB} =10V, f=1MHz	50typ	pF

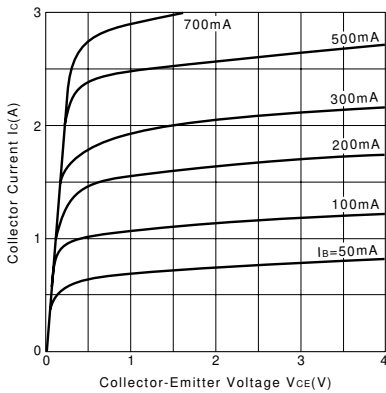
External Dimensions FM20(TO220F)



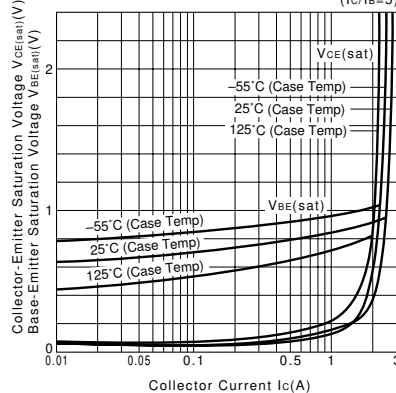
■ Typical Switching Characteristics (Common Emitter)

V _{CC} (V)	R _L (Ω)	I _c (A)	V _{BB1} (V)	V _{BB2} (V)	I _{B1} (A)	I _{B2} (A)	t _{on} (μs)	t _{stg} (μs)	t _f (μs)
250	357	0.7	10	-5	0.1	-0.35	0.7max	4.0max	0.7max

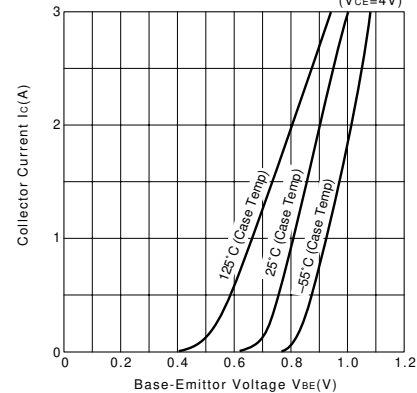
I_c-V_{CE} Characteristics (Typical)



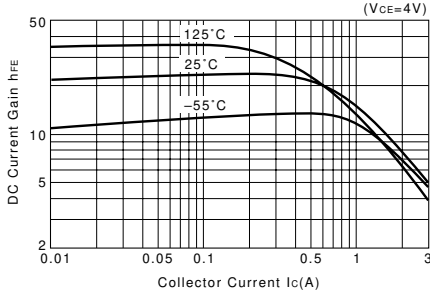
V_{CE(sat)}, V_{BE(sat)}-I_c Temperature Characteristics (Typical)



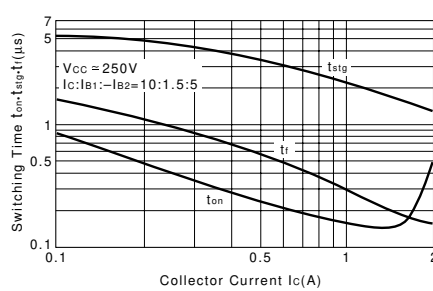
I_c-V_{BE} Temperature Characteristics (Typical)



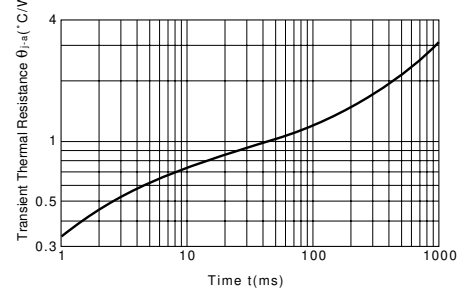
h_{FE}-I_c Characteristics (Typical)



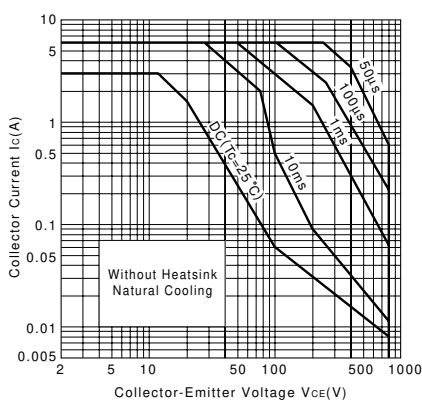
t_{on}•t_{stg}•t_r-I_c Characteristics (Typical)



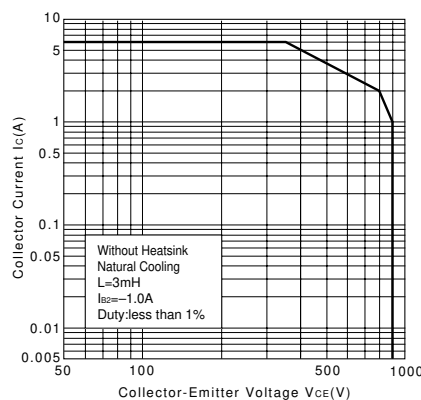
θ_{j-a}-t Characteristics



Safe Operating Area (Single Pulse)



Reverse Bias Safe Operating Area



P_c-T_a Derating

