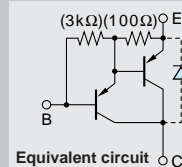


Darlington

2SB1258



Equivalent circuit

Silicon PNP Epitaxial Planar Transistor (Complement to type 2SD1785)

Application : Driver for Solenoid, Relay and Motor and General Purpose

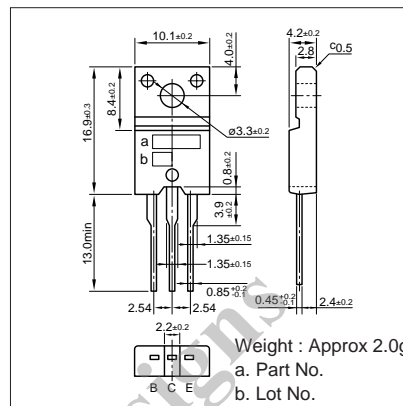
■Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CB0}	-100	V
V _{CE0}	-100	V
V _{EBO}	-6	V
I _c	-6(Pulse-10)	A
I _B	-1	A
P _c	30(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} =-100V	-10max	μA
I _{EBO}	V _{EB} =-6V	-10max	μA
V(BR) _{CEO}	I _c =-10mA	-100min	V
h _{FE}	V _{CE} =-2V, I _c =-3A	1000min	
V _{CE(sat)}	I _c =-3A, I _B =-6mA	-1.5max	V
V _{BE(sat)}	I _c =-3A, I _B =-6mA	-2max	V
f _r	V _{CE} =-12V, I _E =0.2A	100typ	MHz
COB	V _{CB} =-10V, f=1MHz	100typ	pF

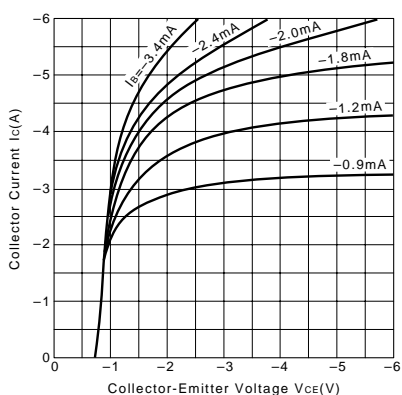
External Dimensions FM20(TO220F)



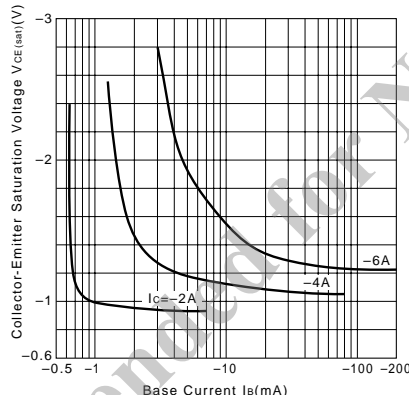
■Typical Switching Characteristics (Common Emitter)

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)
-30	10	-3	-10	5	-6	6	0.6typ	1.6typ	0.5typ

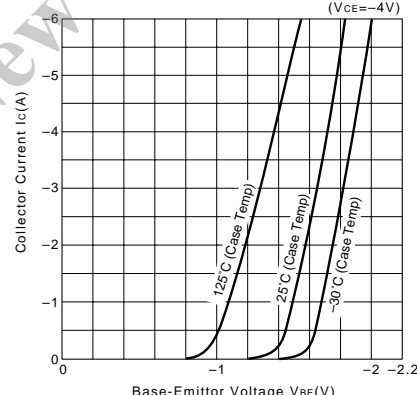
I_c-V_{CE} Characteristics (Typical)



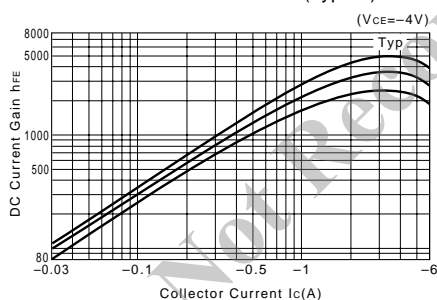
V_{CE(sat)}-I_B Characteristics (Typical)



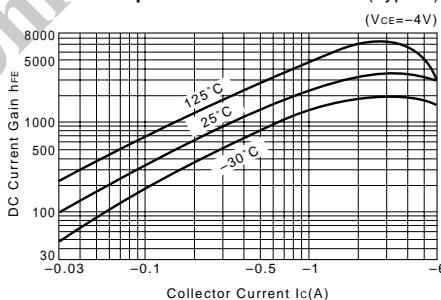
I_c-V_{BE} Temperature Characteristics (Typical)



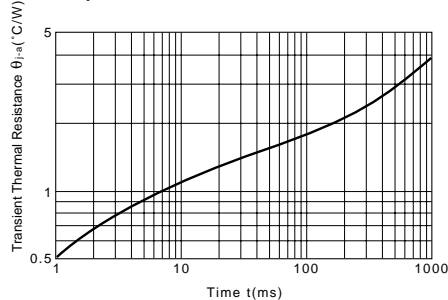
h_{FE}-I_c Characteristics (Typical)



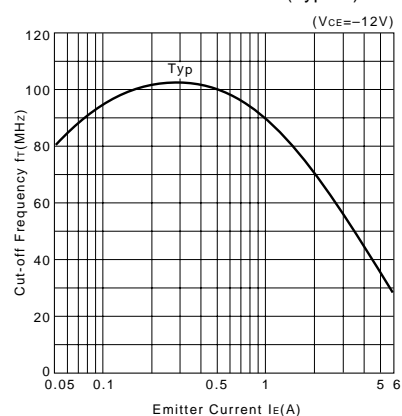
h_{FE}-I_c Temperature Characteristics (Typical)



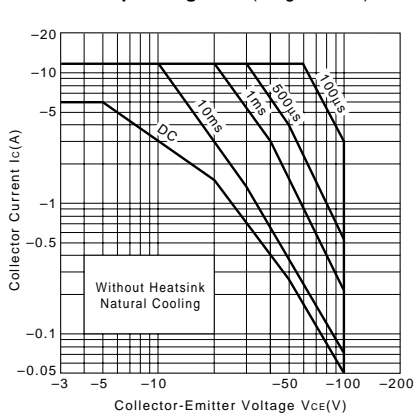
θ_{j-a}-t Characteristics



f_r-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



P_c-T_a Derating

