

2SA1667/1668

Silicon PNP Epitaxial Planar Transistor (Complement to type 2SC4381/4382)

Application : TV Vertical Output, Audio Output Driver and General Purpose

Absolute maximum ratings (Ta=25°C)

Symbol	Ratings		Unit
	2SA1667	2SA1668	
V _{CB0}	-150	-200	V
V _{CEO}	-150	-200	V
V _{EB0}	-6		V
I _c	-2		A
I _b	-1		A
P _c	25(Tc=25°C)		W
T _j	150		°C
T _{stg}	-55 to +150		°C

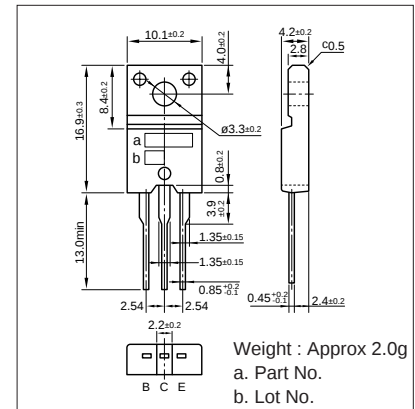
Electrical Characteristics (Ta=25°C)

Symbol	Conditions	Ratings		Unit
		2SA1667	2SA1668	
I _{CB0}	V _{CB} =	-10max	-10max	μA
I _{EB0}	V _{EB} =-6V	-10max		μA
V _{(BR)CEO}	I _c =-25mA	-150min	-200min	V
h _{FE}	V _{CE} =-10V, I _c =-0.7A	60min		
V _{CE(sat)}	I _c =-0.7A, I _b =-0.07A	-1.0max		V
f _r	V _{CE} =-12V, I _e =0.2A	20typ		MHz
C _{OB}	V _{CB} =-10V, f=1MHz	60typ		pF

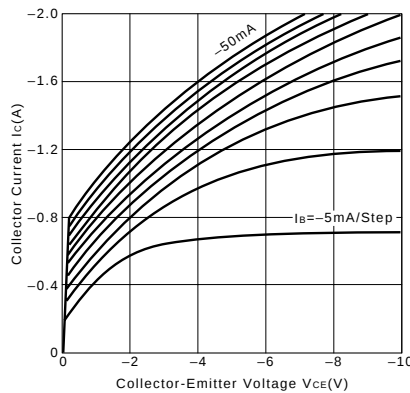
Typical Switching Characteristics (Common Emitter)

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	-100	100	0.4typ	1.5typ	0.5typ

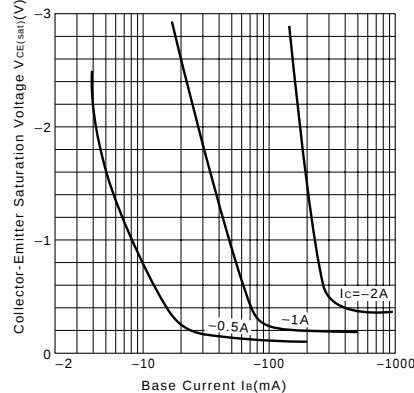
External Dimensions FM20 (TO220F)



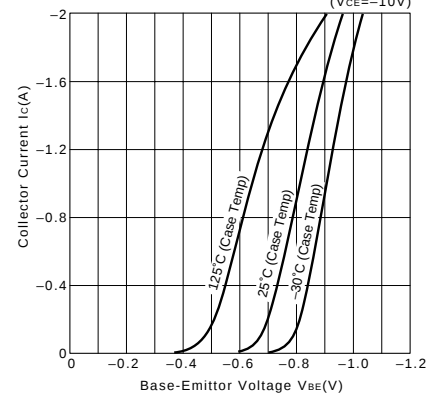
I_c-V_{CE} Characteristics (Typical)



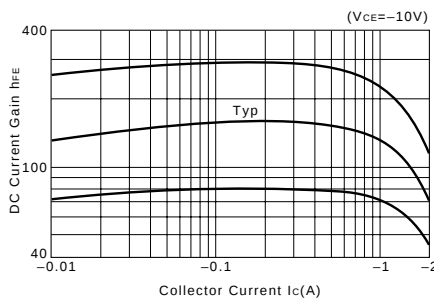
V_{CE(sat)}-I_b Characteristics (Typical)



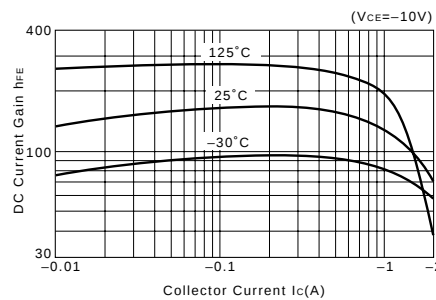
I_c-V_{BE} Temperature Characteristics (Typical)



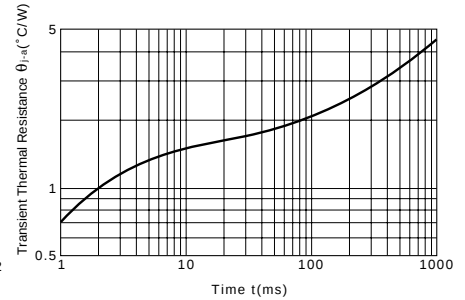
h_{FE}-I_c Characteristics (Typical)



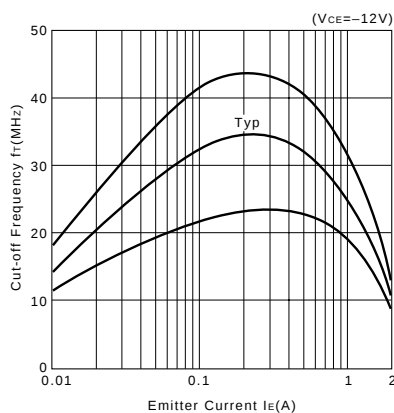
h_{FE}-I_c Temperature Characteristics (Typical)



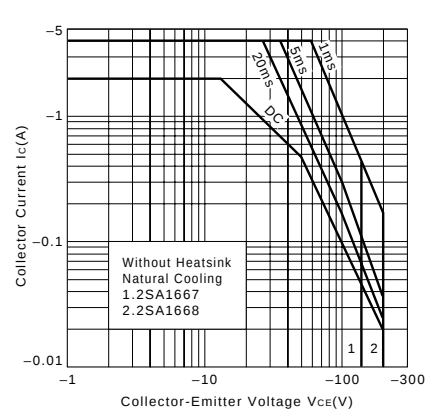
θ_{j-a}-t Characteristics



f_r-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



P_c-T_a Derating

