

2SA1667/1668

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

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

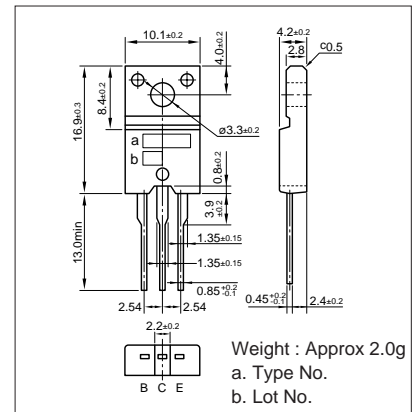
Absolute maximum ratings (Ta=25°C)

Symbol	2SA1667	2SA1668	Unit
V _{CBO}	-150	-200	V
V _{CEO}	-150	-200	V
V _{EBO}	-6		V
I _C	-2		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	2SA1667	2SA1668	Unit
I _{CBO}	V _{CB} =	-10max	-10max	μA
I _{EBO}	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
COB	V _{CB} =-10V, f=1MHz		60typ	pF

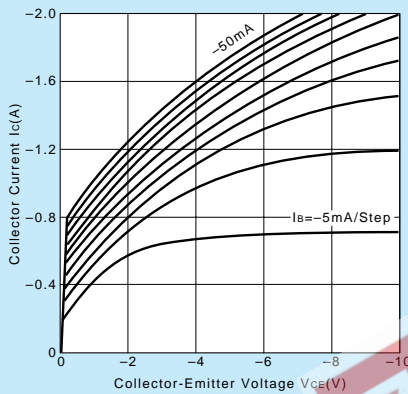
External Dimensions FM20 (TO220F)



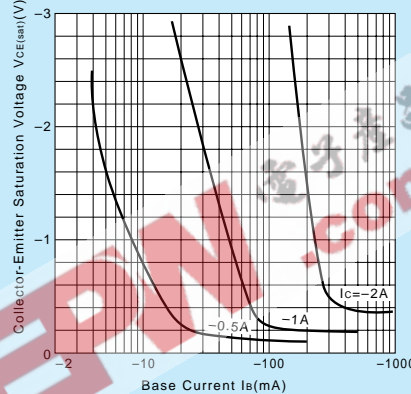
Typical Switching Characteristics (Common Emitter)

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	-100	100	0.4typ	1.5typ	0.5typ

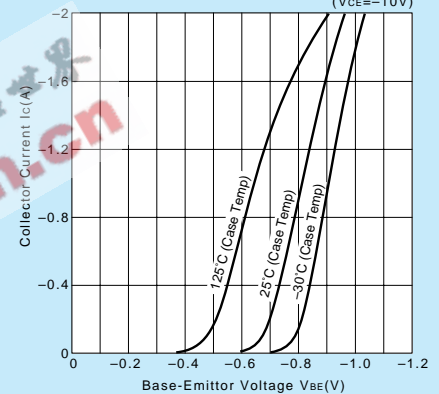
I_C-V_{CE} Characteristics (Typical)



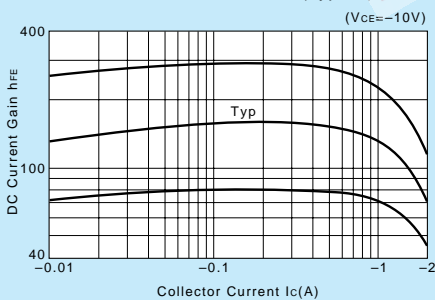
V_{CE(sat)}-I_B Characteristics (Typical)



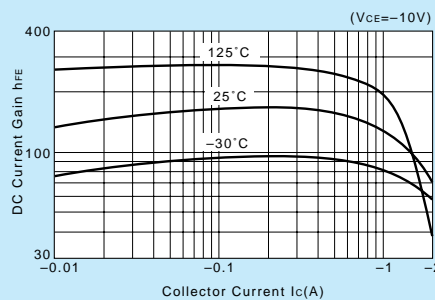
I_C-V_{BE} Temperature Characteristics (Typical)



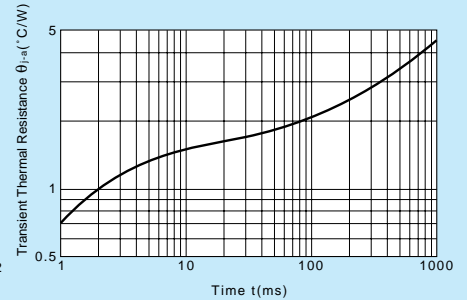
h_{FE}-I_C Characteristics (Typical)



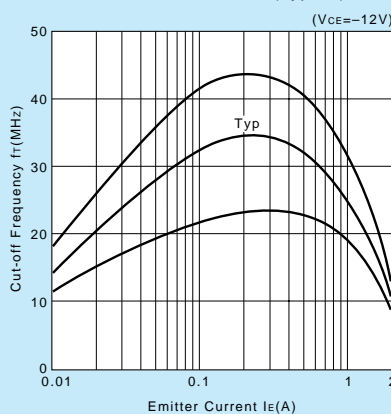
h_{FE}-I_C Temperature Characteristics (Typical)



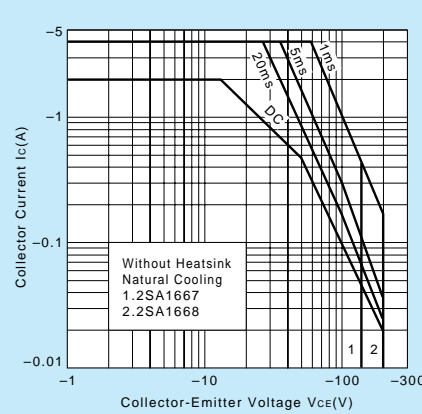
θ_{j-a-t} Characteristics



f_T-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



P_C-T_a Derating

