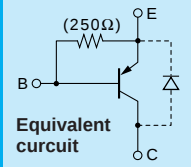


Built-in Diode at C-E
Low $V_{CE}(\text{sat})$

2SA1568



Silicon PNP Epitaxial Planar Transistor (Complement to type 2SC4065)

Application : DC Motor Driver, Chopper Regulator and General Purpose

Absolute maximum ratings (Ta=25°C)

Symbol	2SA1568	Unit
V_{CB0}	-60	V
V_{CE0}	-60	V
V_{EB0}	-6	V
I_C	± 12	A
I_B	-3	A
P_C	35(Tc=25°C)	W
T_j	150	°C
T_{stg}	-55 to +150	°C

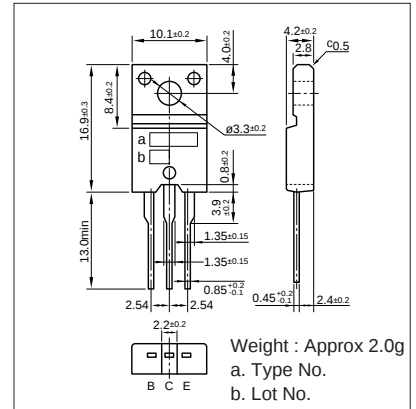
Electrical Characteristics (Ta=25°C)

Symbol	Conditions	2SA1568	Unit
I_{CBO}	$V_{CB} = -60V$	-100max	μA
I_{EBO}	$V_{EB} = -6V$	-60max	mA
$V_{(BR)CEO}$	$I_C = -25mA$	-60min	V
h_{FE}	$V_{CE} = -1V, I_C = -6A$	50min	
$V_{CE(sat)}$	$I_C = -6A, I_B = -0.3A$	-0.35max	V
V_{FEC}	$I_{ECO} = -10A$	-2.5max	V
f_T	$V_{CE} = -12V, I_E = 0.5A$	40typ	MHz
COB	$V_{CB} = -10V, f = 1MHz$	330typ	pF

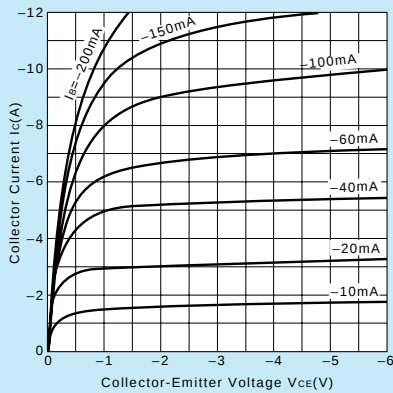
Typical Switching Characteristics (Common Emitter)

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)
-24	4	-6	-10	5	-120	120	0.4typ	0.4typ	0.2typ

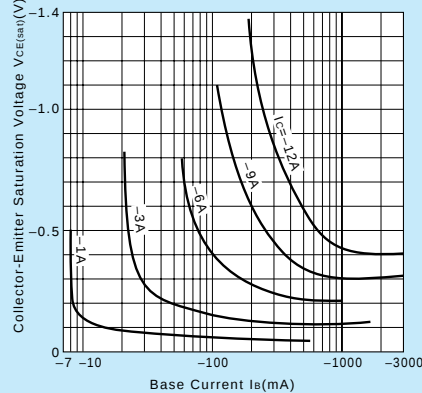
External Dimensions FM20 (TO220F)



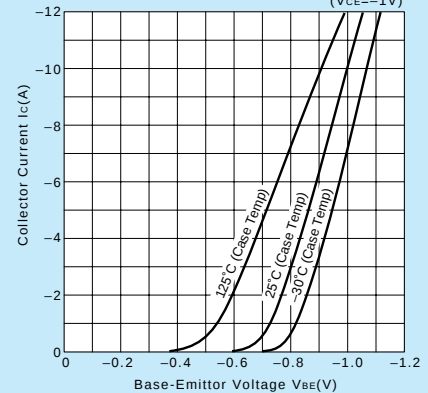
I_C - V_{CE} Characteristics (Typical)



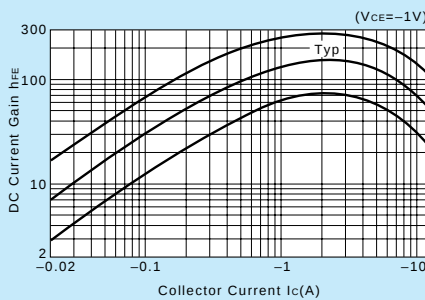
$V_{CE(sat)}$ - I_B Characteristics (Typical)



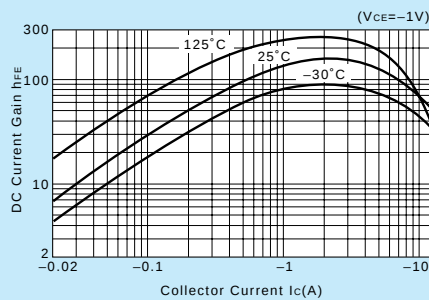
I_C - V_{BE} Temperature Characteristics (Typical)



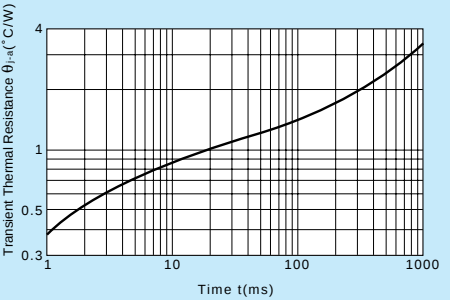
h_{FE} - I_C Characteristics (Typical)



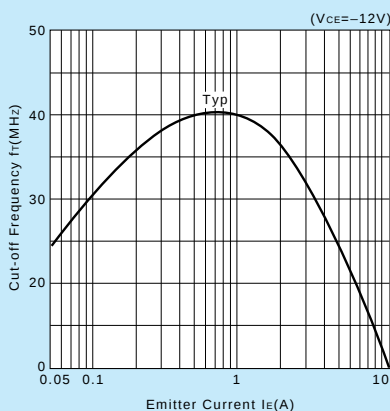
h_{FE} - I_C Temperature Characteristics (Typical)



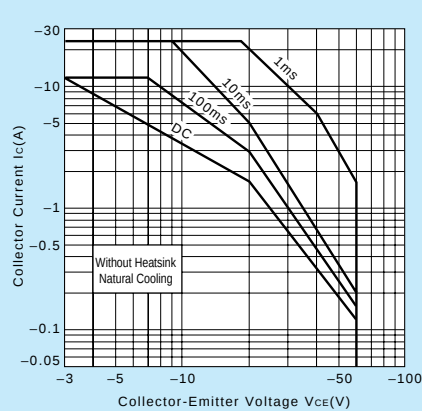
θ_{JA} -t Characteristics



f_T - I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



P_C - T_a Derating

