

2SA1693

Silicon PNP Epitaxial Planar Transistor (Complement to type 2SC4466)

Application : Audio and General Purpose

■ Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
VCBO	−80	V
VCEO	−80	V
VEBO	−6	V
IC	−6	A
IB	−3	A
PC	60(Tc=25°C)	W
Tj	150	°C
Tstg	−55 to +150	°C

■Electrical Characteristics (Ta=25°C)

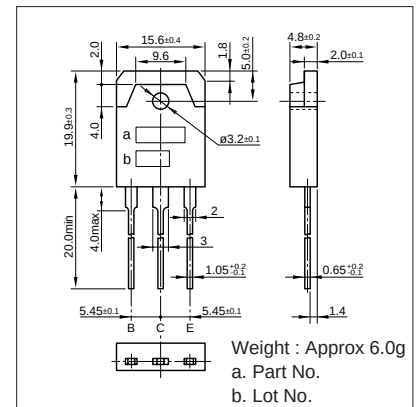
Symbol	Conditions	Ratings	Unit
ICBO	$V_{CB} = -80V$	-10max	μA
IEBO	$V_{EB} = -6V$	-10max	μA
$V_{(BR)CEO}$	$I_C = -50mA$	-80min	V
h_{FE}	$V_{CE} = -4V, I_C = -2A$	50min*	
$V_{CE(sat)}$	$I_C = -2A, I_B = -0.2A$	-1.5max	V
f_T	$V_{CE} = -12V, I_E = 0.5A$	20typ	MHz
COB	$V_{CB} = -10V, f = 1MHz$	150typ	pF

*hFE Rank $\bar{O}$ (50to100), P(70to140), Y(90to180)

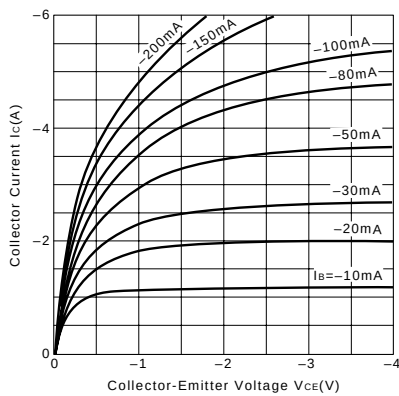
■ Typical Switching Characteristics (Common Emitter)

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)
-30	10	-3	-10	5	-0.3	0.3	0.18typ	1.10typ	0.21typ

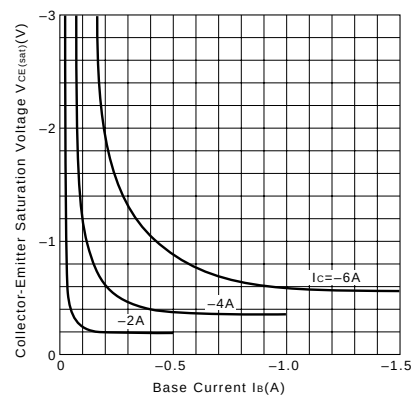
External Dimensions MT-100(TO3P)



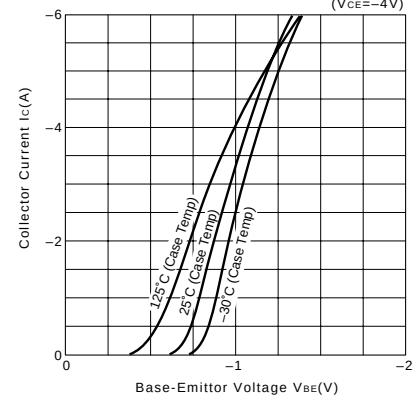
I_C-V_{CE} Characteristics (Typical)



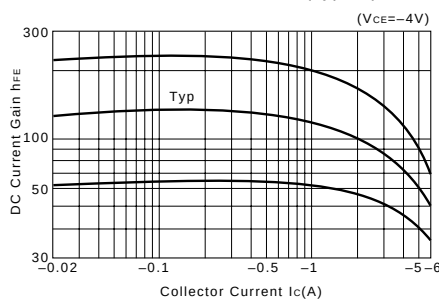
V_{CE(sat)}-I_B Characteristics (Typical)



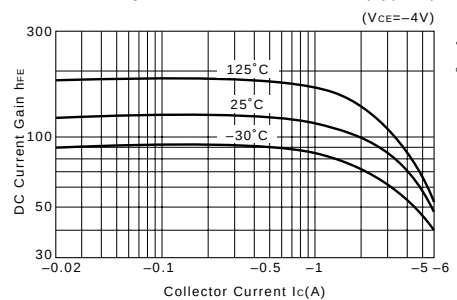
I_C-V_{BE} Temperature Characteristics (Typical)



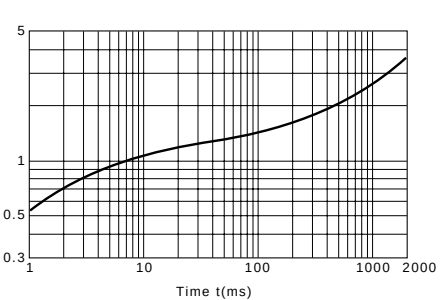
h_{FE} - I_C Characteristics (Typical)



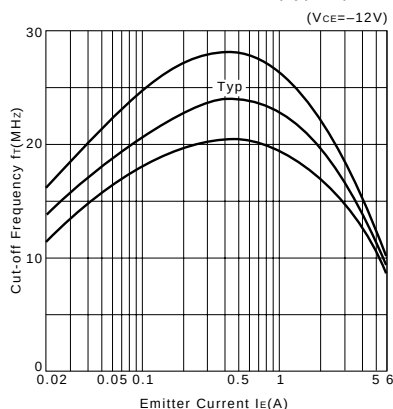
h_{FE} - I_C Temperature Characteristics (Typical)



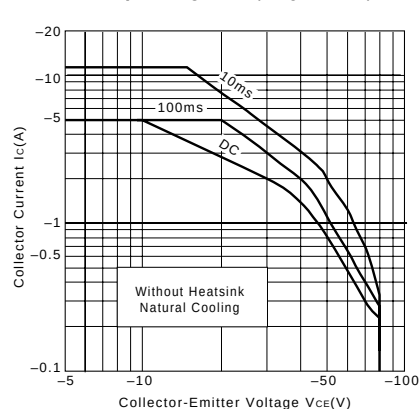
θ_{j-a-t} Characteristics



f_T-I_E Characteristics (Typical)



Safe Operating Area (Single Pulse)



Pc-Ta Derating

