

2SA1205

Silicon PNP Epitaxial Planar

Application Example :

General Purpose

● Outline Drawing 2.....MT-10(TO3P)

● Test Circuit①

Absolute Maximum Ratings

Symbol	2SA1205	Unit
V_{CB0}	-70	V
V_{CE0}	-50	V
V_{EB0}	-6	V
I_C	-12	A
I_B	-4	A
P_C	100 ($T_{FL}=25^{\circ}C$)	W
T_J	150	$^{\circ}C$
T_{stg}	-55~+150	$^{\circ}C$

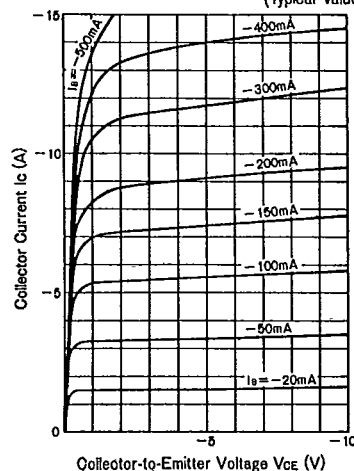
Electrical Characteristics

Symbol	Conditions	2SA1205	Unit
I_{CBO}	$V_{CB}=-70V$	-100max	μA
I_{EBO}	$V_{EB}=-6V$	-100max	μA
$V_{(BR)CEO}$	$I_C=-25mA$	-50min	V
h_{FE}	$V_{CE}=-0.5V, I_C=-5A$	40min	
$V_{CE(sat)}$	$I_C=-5A, I_B=-0.12A$	-0.5max	V
f_T	$V_{CE}=-12V, I_E=3A$	20typ	MHz

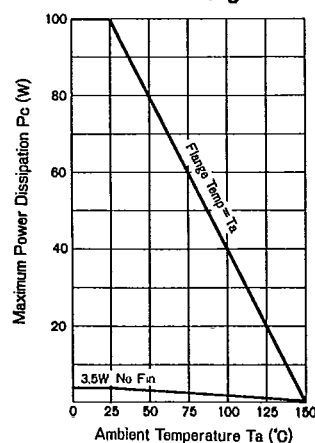
Typical Switching Characteristics (Emitter Common)

V_{CC} (V)	R_L (Ω)	I_C (A)	V_{B2} (V)	I_{B1} (mA)	I_{B2} (mA)	t_{on} (μs)	t_{stg} (μs)	t_f (μs)
-20	4	-5	5	-120	120	0.6typ	0.5typ	0.25typ

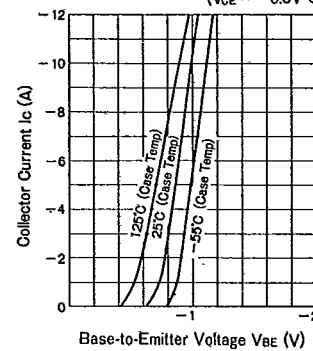
Common Emitter Characteristics (Typical Value)



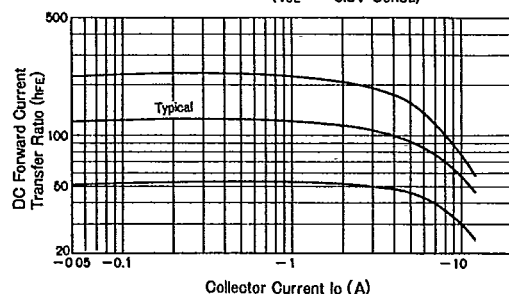
Power Derating



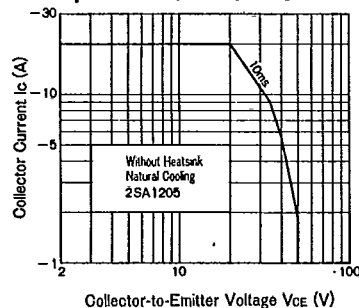
Temperature Characteristics ($V_{CE} = -0.5V$ Const.)



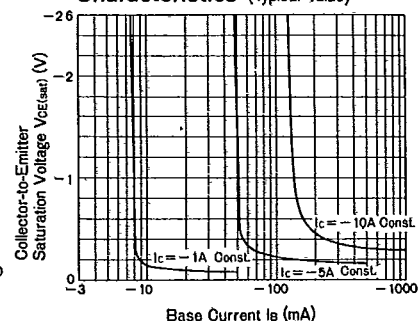
DC Current Gain Characteristics ($V_{CE} = -0.5V$ Const.)



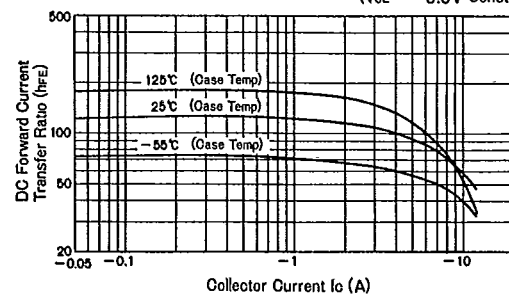
Maximum Areas For Safe Operation (ASO) (Single Pulse)



Collector-to-Emitter Saturation Characteristics (Typical Value)



DC Current Gain Temperature Characteristics ($V_{CE} = -0.5V$ Const.)



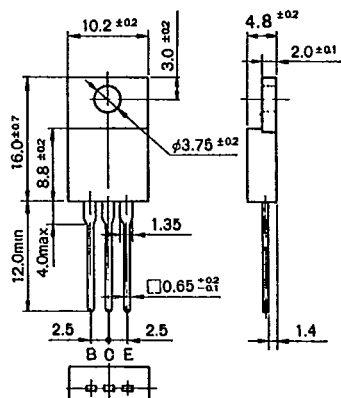
Outline Drawings/Accessories

Outline Drawing

- Flammability: UL94V-0 or equivalent
- Unit: in mm

Outline Drawings 1

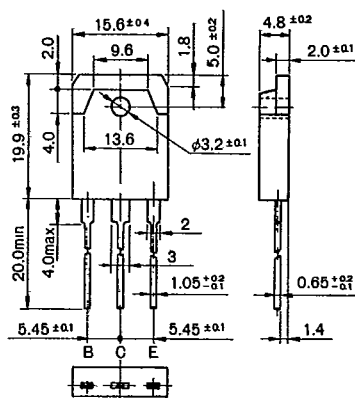
MT-25(TO220)



Weight: Approx. 2.6 g

Outline Drawings 2

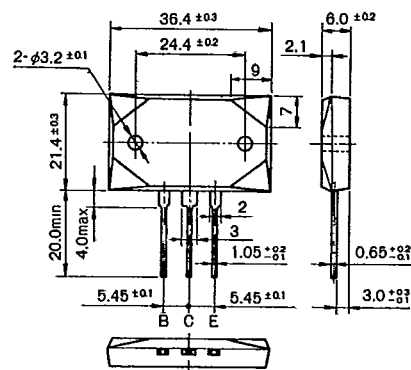
MT-100(TO3P)



Weight: Approx. 6.0 g

Outline Drawings 3

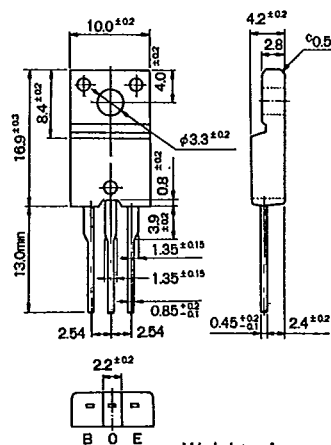
MT-200



Weight: Approx. 18.4 g

Outline Drawings 4

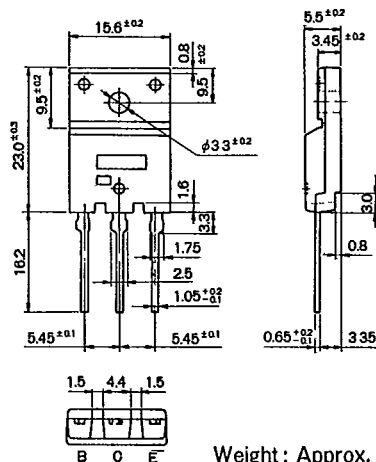
FM20



Weight: Approx. 2.0 g

Outline Drawings 5

FM100



Weight: Approx. 6.5 g

Accessories

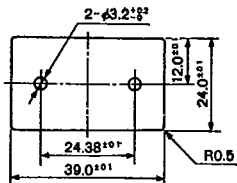
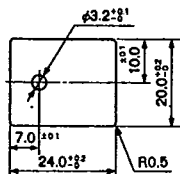
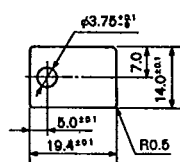
☆Sanken Transistors do not include accessories. Accessories may be attached at a cost if requested.

- Insulator: Mica, $t = 0.06^{+0.045}_{-0.005}$ mm

Type: MT-25 Mica (10)

Type: MT-100 Mica (14)

Type: MT-200 Mica (9)



- Insulation Bush for MT-25(TO220)

