

Silicon NPN Triple Diffused Planar

☆ High Voltage Switching Transistor

T-35-15

2SC2307

Application Example :
Switching Regulator and General Purpose

● Outline Drawing 2.....MT-100(TO3P)

Absolute Maximum Ratings

(Ta=25°C)

Symbol	2SC2307	Unit
V _{CB0}	500	V
V _{CEO}	400	V
V _{EB0}	10	V
I _C	12	A
I _B	4	A
P _C	100 (T _C = 25°C)	W
T _J	150	°C
T _{stg}	-55~+150	°C

Electrical Characteristics

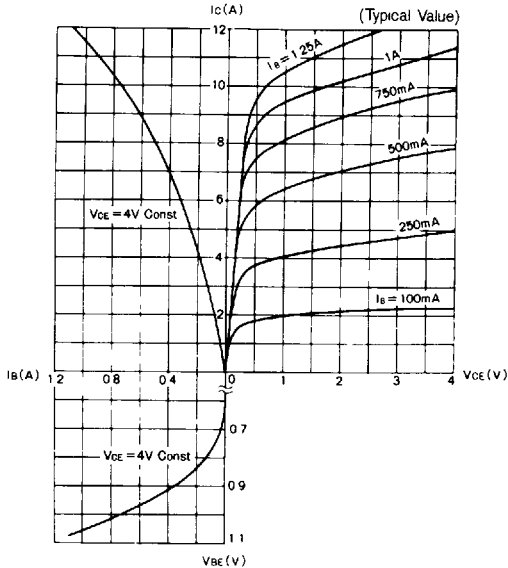
(Ta=25°C)

Symbol	Conditions	2SC2307	Unit
I _{CB0}	V _{CB} =500V	100max	μA
I _{EB0}	V _{EB} =10V	100max	μA
V _{BR} (V _{CEO})	I _C = 25mA	400min	V
h _{FE}	V _{CE} =4V, I _C =7A	10min	
V _{CE} (sat)	I _C = 7A, I _B =1.4A	0.5max	V
V _{BE} (sat)	I _C = 7A, I _B =1.4A	1.3max	V
f _T	V _{CE} =12V, I _E =-1A	18typ	MHz

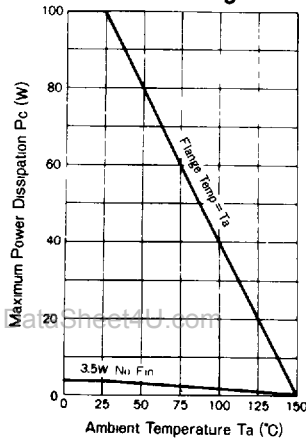
Typical Switching Characteristics (Common Emitter)

V _{CC} (V)	R _L (Ω)	I _C (A)	V _{B2} (V)	I _{B1} (A)	I _{B2} (A)	t _r (μs)	t _{stg} (μs)	t _f (μs)
100	14	7	-5	1.4	-1.4	0.7max	2.5max	0.7max

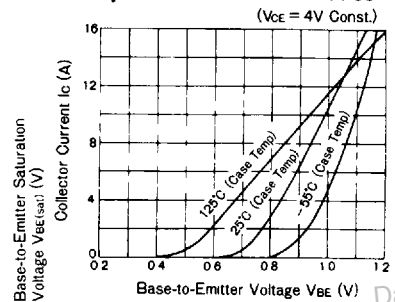
Common Emitter Characteristics



Power Derating

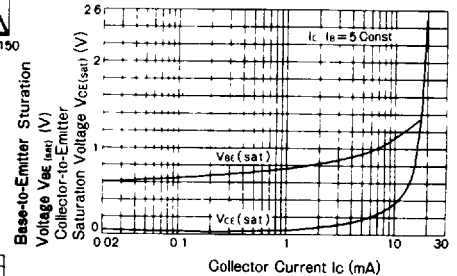


Temperature Characteristics



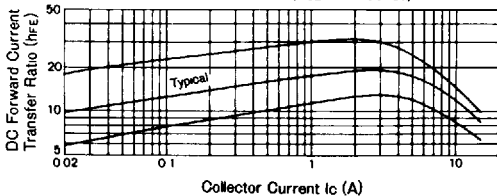
V_{BE}(sat)-I_C Characteristics (Typical Value)

V_{CE}(sat)-I_C Characteristics (Typical Value)

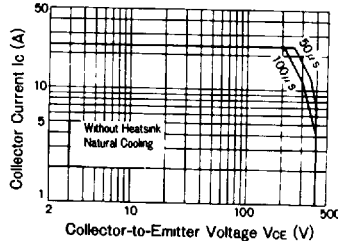


DC Current Gain Characteristics

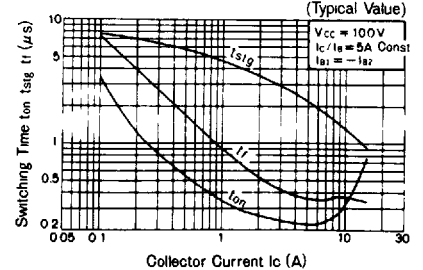
(V_{CE} = 4V Const.)



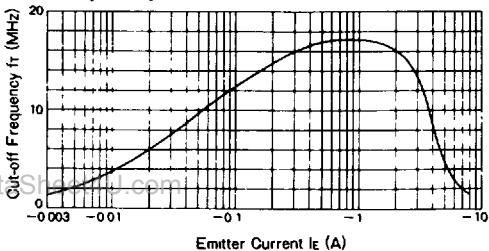
Maximum Areas For Safe Operation (ASO) (Single Pulse)



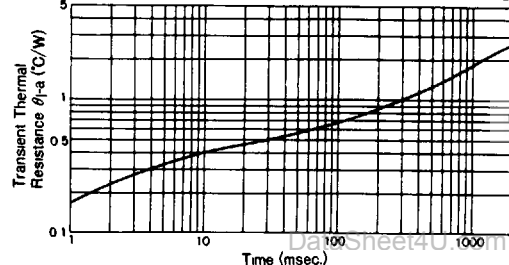
ton · tstg · tf - Ic Characteristics



Frequency Characteristics (V_{CE} = 12V Const.)



Transient Thermal Resistance Characteristics



Outline Drawings/Accessories

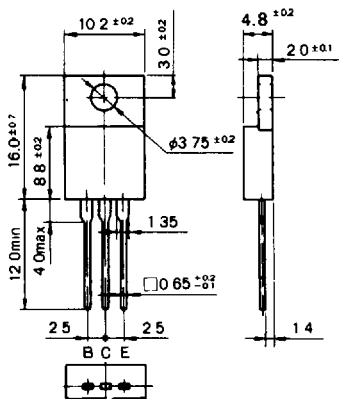
T-91-20

Outline Drawing

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

Outline Drawing 1

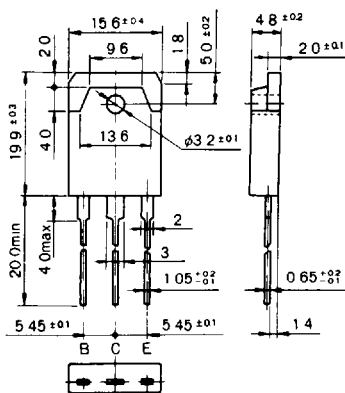
MT-25(TO220)



Weight: Approx. 2.6 g

Outline Drawing 2

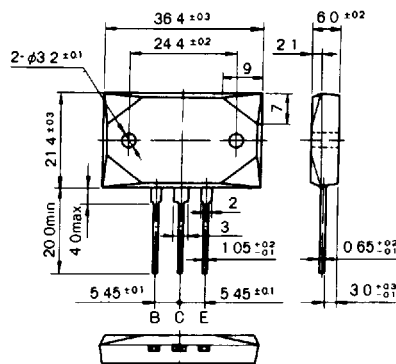
MT-100(TO3P)



Weight: Approx. 6.0 g

Outline Drawing 3

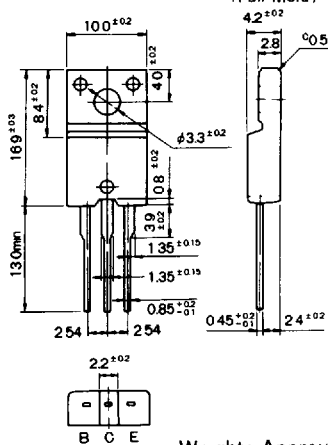
MT-200



Weight: Approx. 18.4 g

Outline Drawing 4

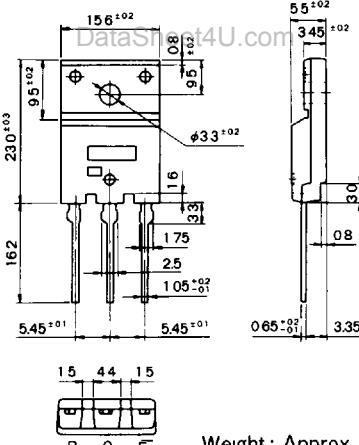
FM20
(Full Mold)



Weight: Approx. 2.0 g

Outline Drawing 5

FM100
(Full Mold)



Weight: Approx. 6.5 g

Accessories

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

☆ Sanken transistor case is a standard size, and can replace any generally sold product.

- Heatsink: Mica, with a thickness of 0.06 mm, +0.045 -0.005 allowance

- Insulation Bush for MT-25 (TO220)

Type Name: Molded (10) Mica

Type Name: Molded (14) Mica

Type Name: Molded (9) Mica

