

2SA770 2SA771

Silicon PNP Epitaxial Planar

☆ Complement to types 2SC1985 thru 2SC1986

Application Example :

General and Industrial Purpose

- Outline Drawing 1MT-25(TO220)
- Test Circuit.....①

Absolute Maximum Ratings

Symbol	2SA770	2SA771	Unit
V _{CB0}	-60	-80	V
V _{CE0}	-60	-80	V
V _{EB0}	-6		V
I _C	-6		A
I _B	-3		A
P _C	40 (T _{FL} = 25°C)		W
T _J	150		°C
T _{stg}	-55~+150		°C

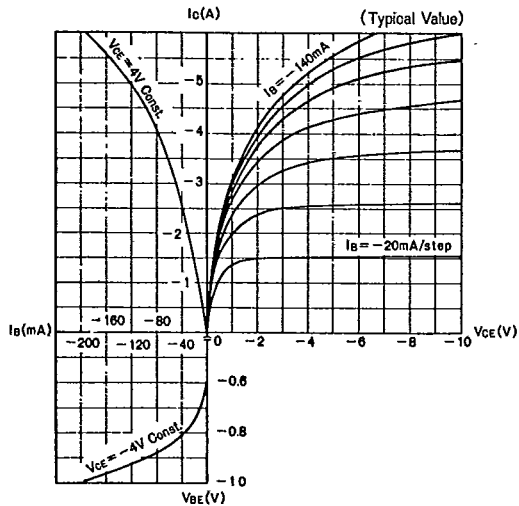
Electrical Characteristics

Symbol	Conditions	2SA770	2SA771	Unit
I _{CB0}	V _{CB} =	-1.0max	-1.0max	mA
V _{CB0}		-60	-80	V
I _{EB0}	V _{EB} = -6V		-1.0max	mA
V _{BE(sat)}	I _C = -25mA	-60min	-80min	V
h _{FE}	V _{CE} = -4V, I _C = -1A		40min	
V _{CE(sat)}	I _C = -3A, I _B = -0.3A		-1.0max	V
f _T	V _{CE} = -12V, I _E = 0.5A		10typ	MHz

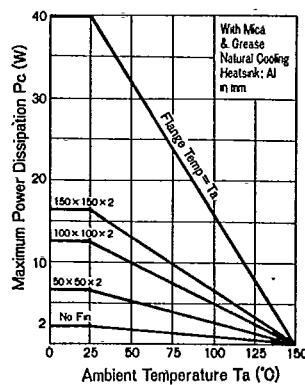
Typical Switching Characteristics (Emitter Common)

V _{CC} (V)	R _L (Ω)	I _C (A)	V _{B2} (V)	I _{B1} (mA)	I _{B2} (mA)	t _r (μs)	t _{stg} (μs)	t _f (μs)
-9	3	-3	5	-400	400	0.9typ	1.0typ	0.1typ

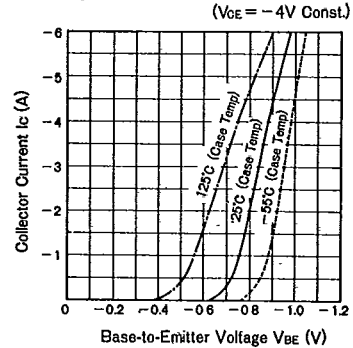
Common Emitter Characteristics



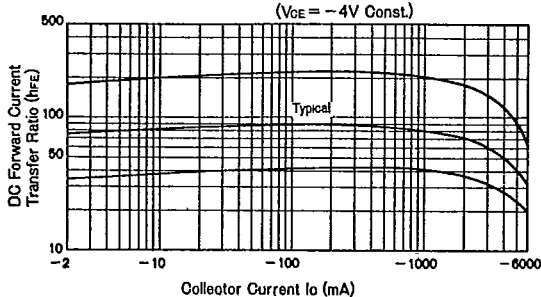
Power Derating



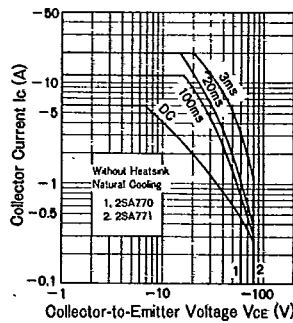
Temperature Characteristics



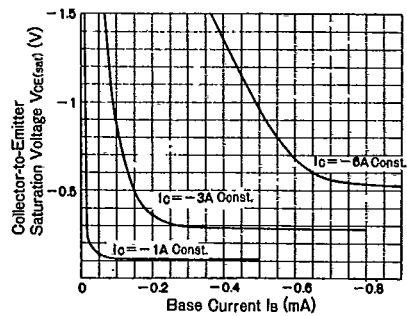
DC Current Gain Characteristics



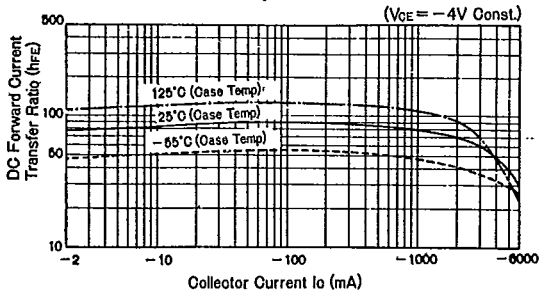
Maximum Areas For Safe Operation (ASO) (Single Pulse)



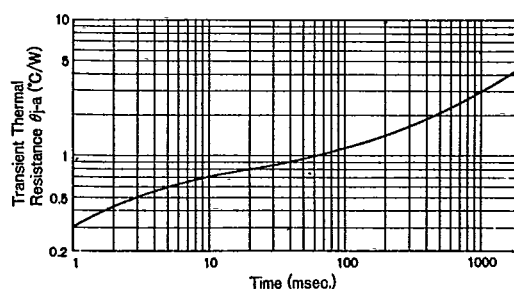
Collector-to-Emitter Saturation Characteristics (Typical Value)



DC Current Gain Temperature Characteristics



Transient Thermal Resistance Characteristics



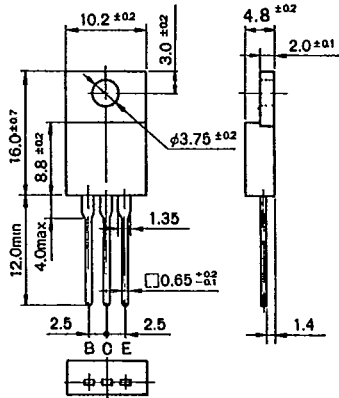
Outline Drawings/Accessories

Outline Drawing

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

Outline Drawings 1

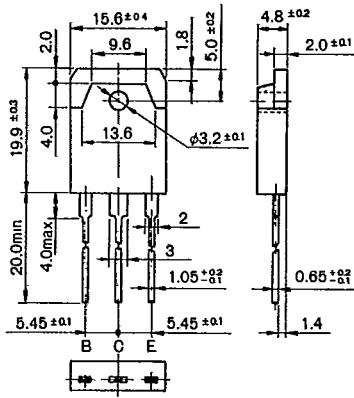
MT-25(TO220)



Weight: Approx. 2.6 g

Outline Drawings 2

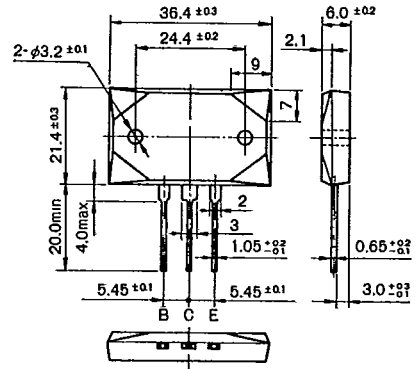
MT-100(TO3P)



Weight: Approx. 6.0 g

Outline Drawings 3

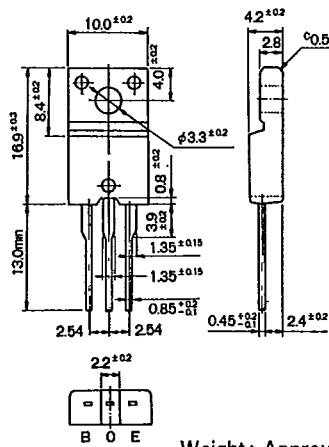
MT-200



Weight: Approx. 18.4 g

Outline Drawings 4

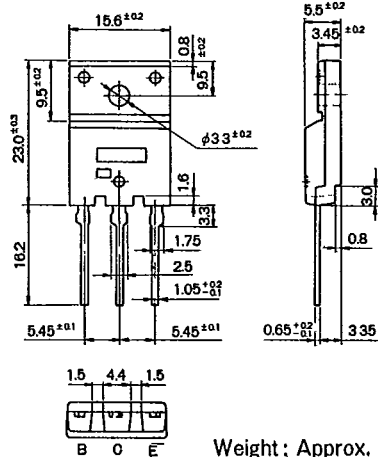
FM20



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)

Technical drawings of mica insulators and an insulation bush. The MT-25 Mica insulator has dimensions: width 19.4 ± 0.1, height 14.0 min, and a central hole diameter of φ3.76 ± 0.1. The MT-100 Mica insulator has dimensions: width 24.0 ± 0.2, height 20.0 ± 0.2, and a central hole diameter of φ3.2 ± 0.1. The MT-200 Mica insulator has dimensions: width 39.0 ± 0.1, height 24.0 ± 0.1, and a central hole diameter of φ3.2 ± 0.1. The insulation bush for MT-25(TO220) has dimensions: width 2.5 ± 0.02, height 6.0 ± 0.02, and a central hole diameter of φ3.1 ± 0.01.