

2SC1985 2SC1986

Silicon NPN Triple Diffused Mesa

☆ Complement to types 2SA770 and 2SA771

Application Example :

General and Industrial Purpose

- Outline Drawing 1.....MT-25(TO220)
- Test Circuit.....③

Electrical Characteristics

Symbol	Conditions	2SC1985	2SC1986	Unit
I _{CB0}	V _{CB} =	1.0max	1.0max	mA
		80	100	
I _{EB0}	V _{EB} =6V	1.0max		mA
V _{(BR)CEO}	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

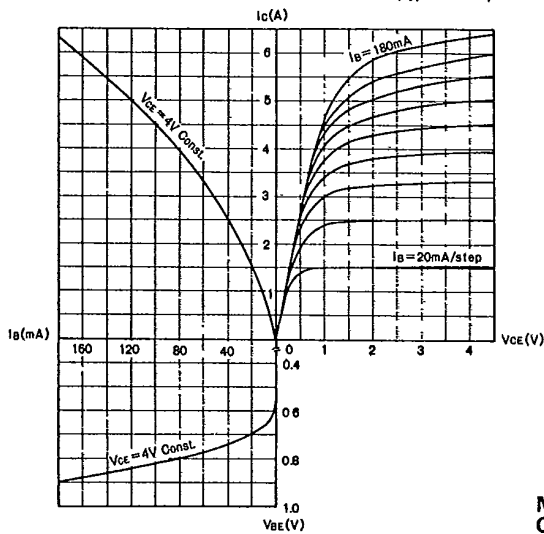
Absolute Maximum Ratings

Symbol	2SC1985	2SC1986	Unit
V _{CB0}	80	100	V
V _{CEO}	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

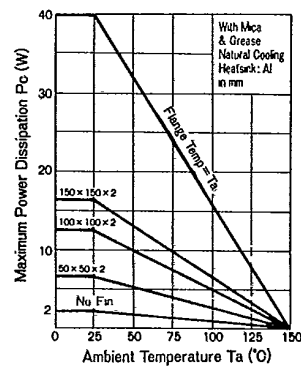
Typical Switching Characteristics (Emitter Common)

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	300	-300	1.1typ	1.8typ	0.55typ

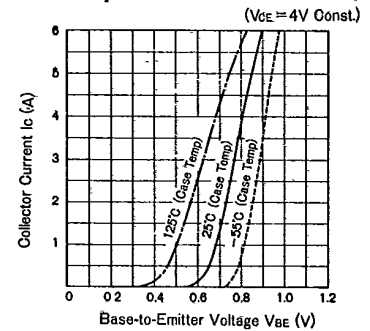
Common Emitter Characteristics (Typical Value)



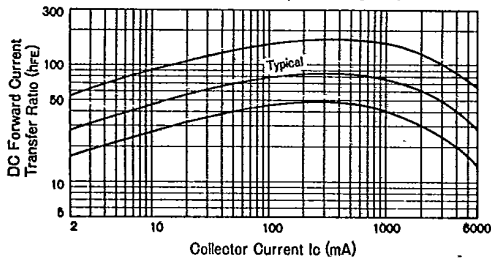
Power Derating



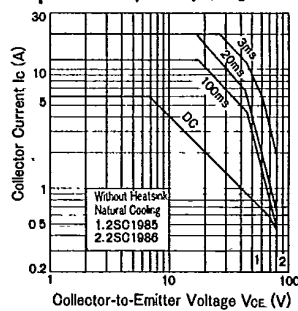
Temperature Characteristics



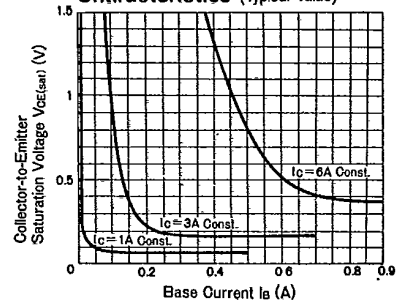
DC Current Gain Characteristics (V_{CE} = 4V Const.)



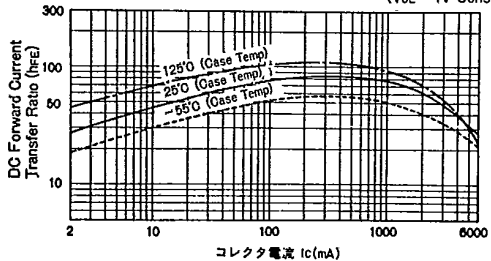
Maximum Areas For Safe Operation (ASO) (Single Pulse)



Collector-to-Emitter Saturation Characteristics (Typical Value)



DC Current Gain Temperature Characteristics (V_{CE} = 4V Const.)



Transient Thermal Resistance Characteristics

