

# 2SA770 2SA771

## Silicon PNP Epitaxial Planar

☆ Complement to types 2SC1985 thru 2SC1986

<b>Application Example :</b>	● Outline Drawing 1 ..... MT-25(TO220)
General and Industrial Purpose	● Test Circuit..... ①

### Absolute Maximum Ratings

Symbol	2SA770	2SA771	Unit
V <sub>CB0</sub>	-60	-80	V
V <sub>CEO</sub>	-60	-80	V
V <sub>EB0</sub>	-6		V
I <sub>C</sub>	-6		A
I <sub>B</sub>	-3		A
P <sub>C</sub>	40 (T <sub>FL</sub> =25°C)		W
T <sub>J</sub>	150		°C
T <sub>stg</sub>	-55~+150		°C

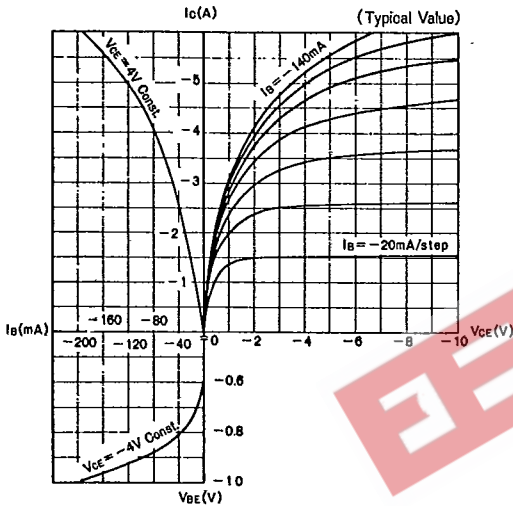
### Electrical Characteristics

Symbol	Conditions	2SA770	2SA771	Unit
I <sub>CBO</sub>	V <sub>CB</sub> =	-1.0max	-1.0max	mA
I <sub>EBO</sub>	V <sub>EB</sub> =-6V		-1.0max	mA
V <sub>(BR)CEO</sub>	I <sub>C</sub> = -25mA	-60min	-80min	V
h <sub>FE</sub>	V <sub>CE</sub> =-4V, I <sub>C</sub> =-1A		40min	
V <sub>CE(sat)</sub>	I <sub>C</sub> = -3A, I <sub>B</sub> =-0.3A		-1.0max	V
f <sub>T</sub>	V <sub>CE</sub> =-12V, I <sub>E</sub> =0.5A		10typ	MHz

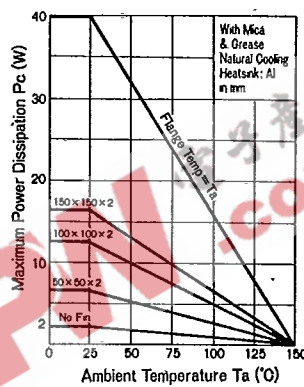
### Typical Switching Characteristics (Emitter Common)

V <sub>CC</sub> (V)	R <sub>L</sub> (Ω)	I <sub>C</sub> (A)	V <sub>B2</sub> (V)	I <sub>B1</sub> (mA)	I <sub>B2</sub> (mA)	t <sub>r</sub> (μs)	t <sub>stg</sub> (μs)	t <sub>f</sub> (μs)
-9	3	-3	5	-400	400	0.9typ	1.0typ	0.1typ

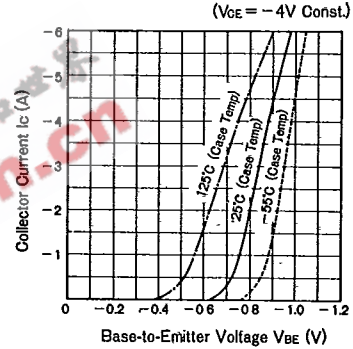
### Common Emitter Characteristics



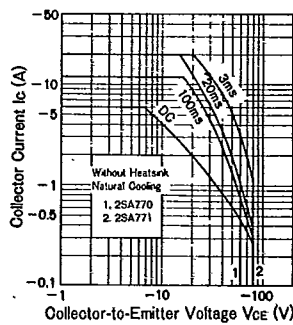
### Power Derating



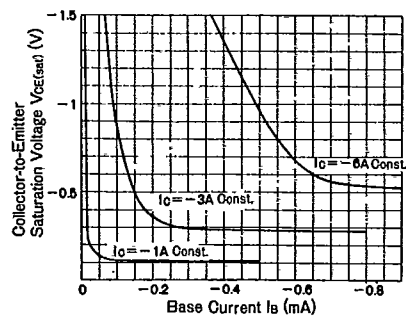
### Temperature Characteristics



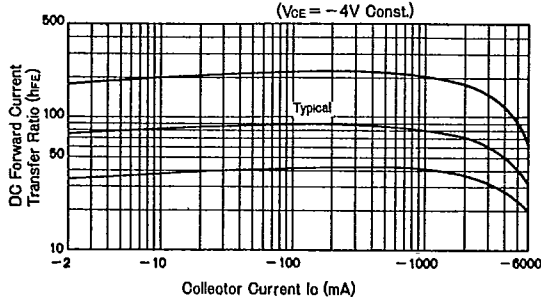
### Maximum Areas For Safe Operation (ASO) (Single Pulse)



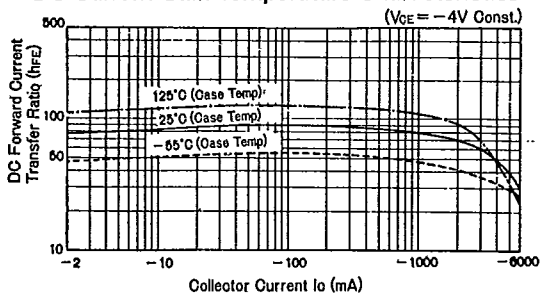
### Collector-to-Emitter Saturation Characteristics (Typical Value)



### DC Current Gain Characteristics



### DC Current Gain Temperature Characteristics



### Transient Thermal Resistance Characteristics

