

# TRANSISTOR (NPN)

## FEATURES

- High DC Current gain.
- Complimentary to 2SB624

## MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V <sub>CB0</sub>	Collector-Base Voltage	30	V
V <sub>CEO</sub>	Collector-Emitter Voltage	25	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current -Continuous	700	mA
P <sub>C</sub>	Collector Power Dissipation	200	mW
T <sub>j</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C

## SOT-23

- 1.BASE
- 2.EMITTER
- 3.COLLECTOR



## ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25°C unless otherwise specified)

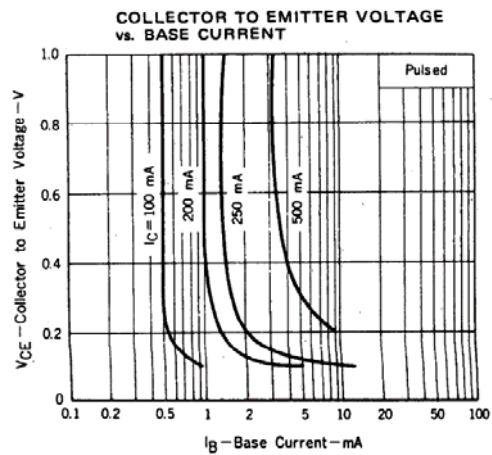
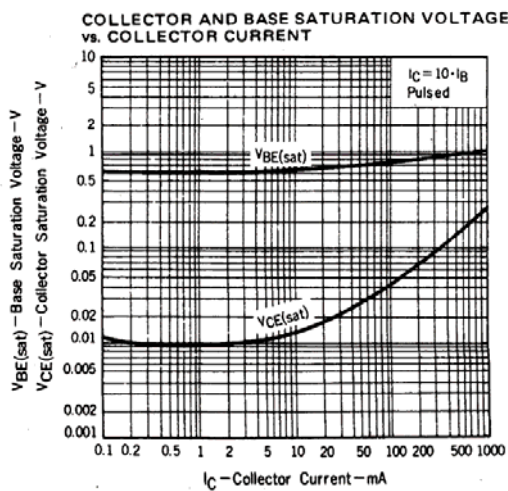
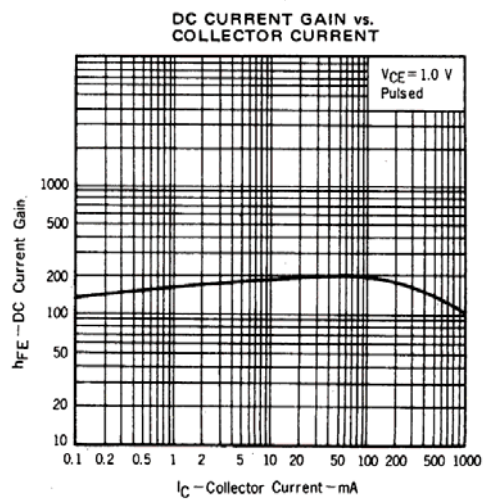
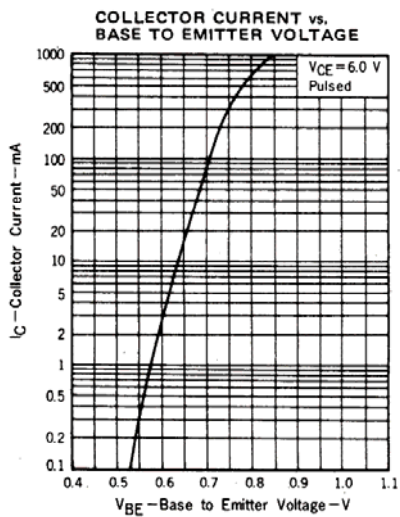
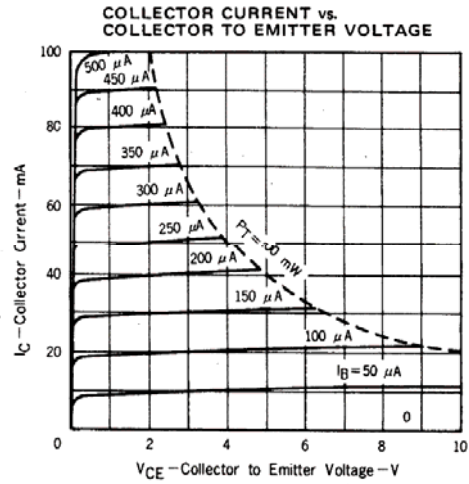
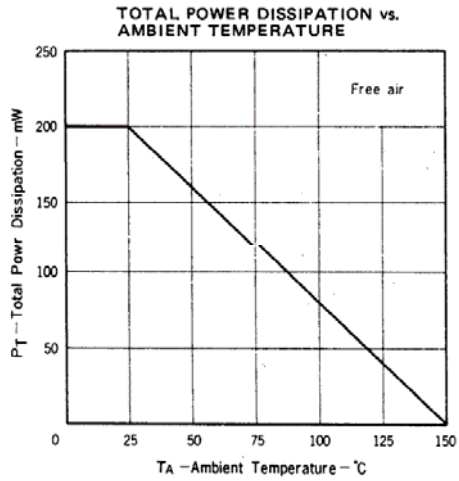
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =100μA, I <sub>E</sub> =0	30			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 1mA, I <sub>B</sub> =0	25			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 100μA, I <sub>C</sub> =0	5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =30V, I <sub>E</sub> =0			0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> =0			0.1	μA
DC current gain	h <sub>FE(1)</sub> *	V <sub>CE</sub> = 1V, I <sub>C</sub> = 100mA	110		400	
	h <sub>FE(2)</sub> *	V <sub>CE</sub> =1V, I <sub>C</sub> = 700mA	50			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub> *	I <sub>C</sub> =700mA, I <sub>B</sub> =70mA			0.6	V
Base-emitter voltage	V <sub>BE</sub> *	V <sub>CE</sub> =6V, I <sub>C</sub> =10mA	0.6		0.7	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> = 10mA	170			MHz
Collector Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =6V, I <sub>E</sub> =0, f=10MHz		12		pF

\* Pulse test : Pulse width ≤350μs, Duty Cycle ≤2%.

## CLASSIFICATION OF h<sub>FE(1)</sub>

Marking	DV1	DV2	DV3	DV4	DV5
Range	110-180	135-220	170-270	200-320	250-400

### Typical Characteristics



Typical Characteristics

