

# 2SB624 TRANSISTOR (PNP)

#### **FEATURES**

- High DC current gain. h<sub>FE</sub>:200 TYP.(V<sub>CE</sub>=-1V,I<sub>C</sub>=-100mA)
- Complimentary to 2SD596.

# MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	-30	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-25	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
Ic	Collector Current -Continuous	-700	mA
P <sub>D</sub>	Total Device Dissipation	200	mW
T <sub>J</sub> ,T <sub>stg</sub>	Operation Junction and Storage Temperature Range	-55-150	°C



## ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-100μΑ,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> = -100μΑ, I <sub>C</sub> =0	-5			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =-30 V , 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	
Do current gam	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> =-700 mA, 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		160		MHz
Collector Output Capacitance	Соь	VCB=-6V,IE=0,f=1MHZ		17		pF

<sup>\*</sup> Pulse test : Pulse width ≤350µs,Duty Cycle≤2%.

### **CLASSIFICATION OF hfe(1)**

Marking	BV1	BV2	BV3	BV4	BV5
Range	110-180	135-220	170-270	200-320	250-400



