

### 2SB624 TRANSISTOR (PNP)

#### FEATURES

Power dissipation

$$P_{CM}: 0.2 \text{ W (Tamb=25}^\circ\text{C)}$$

Collector current

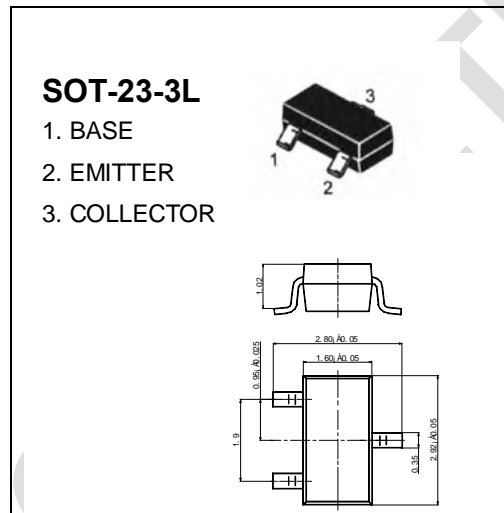
$$I_{CM}: -0.7 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: -30 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 \text{ mA}, I_B = 0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -30 \text{ V}, I_E = 0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5 \text{ V}, I_C = 0$			-0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}^*$	$V_{CE} = -1 \text{ V}, I_C = -100 \text{ mA}$	110		400	
	$h_{FE(2)}^*$	$V_{CE} = -1 \text{ V}, I_C = -700 \text{ mA}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C = -700 \text{ mA}, I_B = -70 \text{ mA}$			-0.6	V
Base-emitter voltage	$V_{BE(on)}^*$	$V_{CE} = -6 \text{ V}, I_C = -10 \text{ mA}$	-0.6		-0.7	V
Transition frequency	$f_T$	$V_{CE} = -6 \text{ V}, I_C = -10 \text{ mA}$	140			MHz

\* Pulse test : Pulse width  $\leq 350\mu\text{s}$ , Duty Cycle  $\leq 2\%$ .

#### CLASSIFICATION OF $h_{FE(1)}$

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