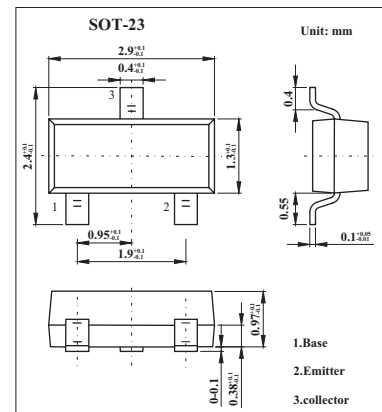


## PNP General Purpose Transistor

## 2SA1774

## ■ Features

- High  $h_{FE}$  : 210 ~ 460 (typ.)
- Low  $V_{CE(sat)}$  < 0.5V

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Collector-Base Voltage	$V_{CBO}$	-60	V
Emitter-Base Voltage	$V_{EBO}$	-6	V
Collector Current- Continuous	$I_C$	-100	mA
Power Dissipation *	$P_D$	150	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\* Device mounted on a FR-4 glass epoxy printed circuit board using the minimum recommended footprint.

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector Base Breakdown Voltage	$V_{CBO}$	$I_C = -50\mu\text{A}$ , $I_E = 0$	-60			V
Collector Emitter Breakdown Voltage	$V_{CEO}$	$I_C = -1.0\text{mA}$ , $I_B = 0$	-50			V
Emitter Base Breakdown Voltage	$V_{EBO}$	$I_E = -50\mu\text{A}$ , $I_C = 0$	-6			V
Collector Cut-off Current	$I_{CBO}$	$I_E = 0$ , $V_{CB} = -30\text{V}$			-0.5	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$I_B = 0$ , $V_{EB} = -5.0\text{V}$			-0.5	$\mu\text{A}$
DC Current Gain *	$h_{FE}$	$I_C = -1.0\text{mA}$ , $V_{CE} = -6.0\text{V}$	120		560	
Collector-Emitter Saturation Voltage *	$V_{CE(sat)}$	$I_C = -50\text{mA}$ , $I_B = -5.0\text{mA}$			-0.5	V
Transition Frequency	$f_T$	$V_{CE} = -12\text{V}$ , $I_C = -2.0\text{mA}$ , $f = 30\text{MHz}$		140		MHz
Output Capacitance	$C_{OB}$	$V_{CB} = -12\text{V}$ , $I_E = 0$ , $f = 1\text{MHz}$		3.5		pF

\* Pulse Test: Pulse Width  $\leq 300\mu\text{s}$ , D.C.  $\leq 2\%$ .