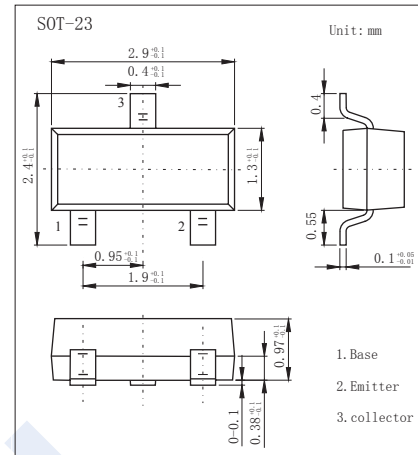


## PNP Transistors

### 2SA1252-HF

#### ■ Features

- High  $V_{EBO}$ .
- Wide ASO and high durability against breakdown.
- Complementary to 2SC3134-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	-60	V
Collector-emitter voltage	$V_{CEO}$	-50	V
Emitter-base voltage	$V_{EBO}$	-15	V
Collector current	$I_C$	-150	mA
Collector current (pulse)	$I_{CP}$	-300	mA
Collector dissipation	$P_C$	200	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CBO}$	$I_C = -100 \mu\text{A}$ , $I_E = 0$	-60			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_C = -1 \text{ mA}$ , $I_B = 0$	-50			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E = -100 \mu\text{A}$ , $I_C = 0$	-15			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = -40 \text{ V}$ , $I_E = 0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -10 \text{ V}$ , $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50 \text{ mA}$ , $I_B = -5 \text{ mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50 \text{ mA}$ , $I_B = -5 \text{ mA}$			-1.2	
DC forward current gain	$h_{FE}$	$V_{CE} = -6 \text{ V}$ , $I_C = -1 \text{ mA}$	90		600	
Collector output capacitance	$C_{ob}$	$V_{CB} = -6 \text{ V}$ , $f = 1 \text{ MHz}$		3.5		pF
Transition frequency	$f_T$	$V_{CE} = -6 \text{ V}$ , $I_C = -1 \text{ mA}$		100		MHz

#### ■ Classification of $h_{FE}$

Type	2SA1252-D4-HF	2SA1252-D5-HF	2SA1252-D6-HF	2SA1252-D7-HF
Range	90-180	135-270	200-400	300-600
Marking	D4 <sub>F</sub>	D5 <sub>F</sub>	D6 <sub>F</sub>	D7 <sub>F</sub>

2SA1252-HF

Typical Characteristics

