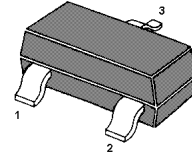


## PNP Silicon Epitaxial Planar Transistor

Low frequency transistor

The transistor is subdivided into two groups Q and R, according to its DC current gain.



1.Base 2.Emitter 3.Collector  
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	80	V
Collector Emitter Voltage	$-V_{CEO}$	80	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	0.5	A
Collector Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-55 to +150	$^\circ\text{C}$

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

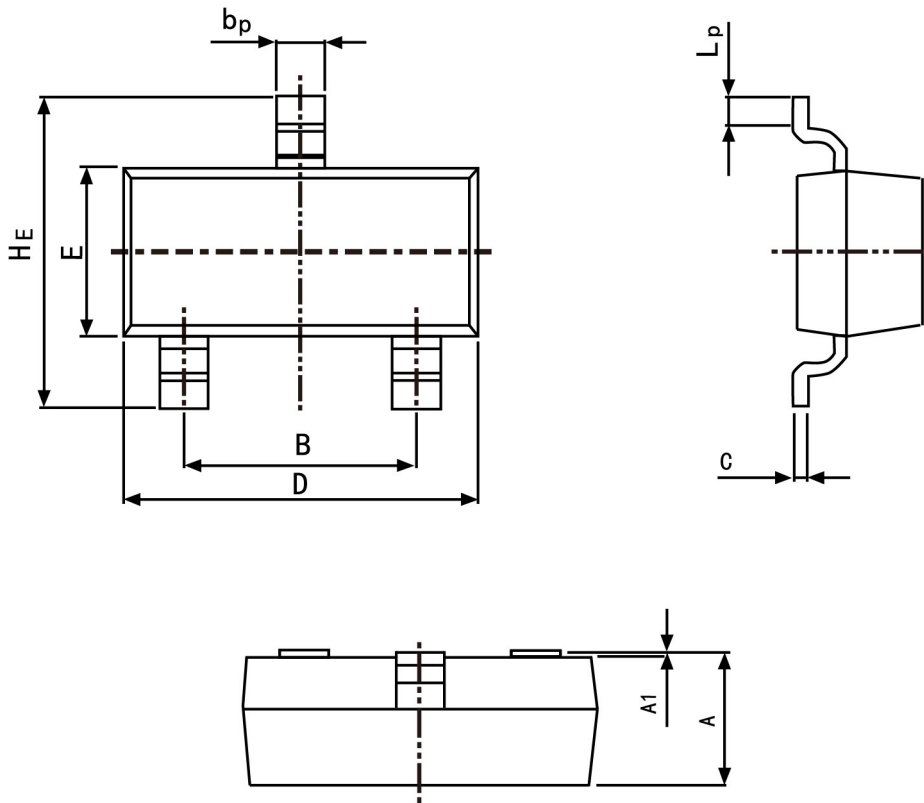
Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{CE} = 3\text{ V}$ , $-I_C = 100\text{ mA}$	Q	$h_{FE}$	120	-	270	-
	R	$h_{FE}$	180	-	390	-
Collector Cutoff Current at $-V_{CB} = 50\text{ V}$	$-I_{CBO}$	-	-	0.5	$\mu\text{A}$	
Emitter Cutoff Current at $-V_{EB} = 4\text{ V}$	$-I_{EBO}$	-	-	0.5	$\mu\text{A}$	
Collector-Base Breakdown Voltage at $-I_C = 50\text{ }\mu\text{A}$	$-V_{CBO}$	80	-	-	V	
Emitter-Base Breakdown Voltage at $-I_E = 50\text{ }\mu\text{A}$	$-V_{EBO}$	5	-	-	V	
Collector-Emitter Breakdown Voltage at $-I_C = 2\text{ mA}$	$-V_{CEO}$	80	-	-	V	
Collector-Emitter Saturation Voltage at $-I_C = 500\text{ mA}$ , $-I_B = 50\text{ mA}$	$-V_{CE(sat)}$	-	-	0.5	V	
Output Capacitance at $-V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	11	-	pF	
Transition Frequency at $-V_{CE} = 10\text{ V}$ , $I_E = 50\text{ mA}$ , $f = 100\text{ MHz}$	$f_T$	-	180	-	MHz	



## PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.40
B	1.78	2.04
$b_p$	0.35	0.50
C	0.08	0.19
D	2.70	3.10
E	1.20	1.65
HE	2.20	3.00
$A_1$	0.100	0.013
$L_p$	0.20	0.50