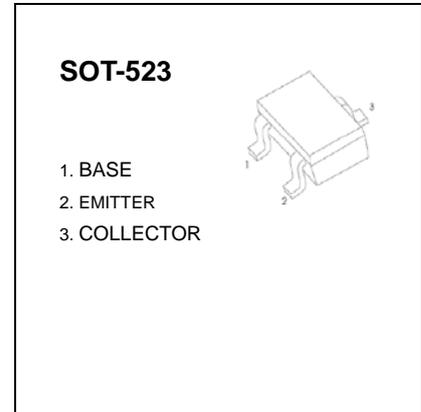


## PNP Silicon Epitaxial Planar Transistor

### Features:

- A collector current is large.
- Collector saturation voltage is low.  
 $-V_{CE(sat)}: 250\text{mV(Max.) at } -I_C=200\text{mA}/-I_B=10\text{mA}$

**MARKING: BW**



### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector- Base Voltage	-15	V
$V_{CEO}$	Collector-Emitter Voltage	-12	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current -Continuous	-0.5	A
$P_C$	Collector Power Dissipation	0.15	W
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55-150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu\text{A}, I_E=0$	-15			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-12			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu\text{A}, I_C=0$	-6			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-15\text{V}, I_E=0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-6\text{V}, I_C=0$			-0.1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=-2\text{V}, I_C=-10\text{mA}$	270		680	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-200\text{mA}, I_B=-10\text{mA}$			-0.25	V
Transition frequency	$f_T$	$V_{CE}=-2\text{V}, I_C=-10\text{mA}, f=100\text{MHz}$		260		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		6.5		pF

## Typical Characteristics

