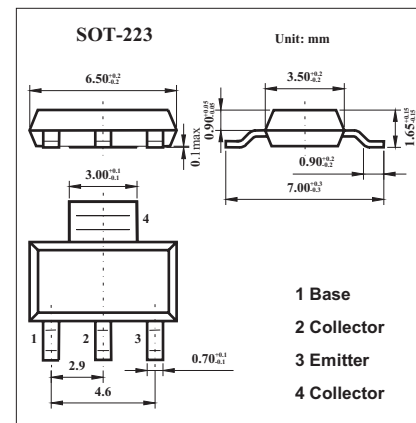


## PNP High-Voltage Transistor

## BSP16

## ■ Features

- High voltage (max. 350 V).

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

Parameter	Symbol	Rating	Unit
collector-base voltage (open emitter)	$V_{CB0}$	-350	V
collector-emitter voltage (open base)	$V_{CE0}$	-300	V
emitter-base voltage (open collector)	$V_{EB0}$	-6	V
collector current (DC)	$I_C$	-200	mA
base current (DC)	$I_B$	-200	mA
total power dissipation $T_{amb} \leq 25^\circ\text{C}^*$	$P_{tot}$	1.28	W
storage temperature	$T_{stg}$	-65 to 150	$^\circ\text{C}$
junction temperature	$T_j$	150	$^\circ\text{C}$
operating ambient temperature	$T_{amb}$	-65 to 150	$^\circ\text{C}$
thermal resistance from junction to ambient *	$R_{th\ j-a}$	97	K/W
thermal resistance from junction to soldering point	$R_{th\ j-s}$	16	K/W

\*. Device mounted on printed-circuit board, single sided copper, tinplated, mounting pad for collector  $1\text{ cm}^2$ .

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
collector cut-off current	$I_{CBO}$	$I_E = 0; V_{CB} = -280\text{ V}$			-100	nA
emitter cut-off current	$I_{EBO}$	$I_C = 0; V_{EB} = -6\text{ V}$			-100	nA
DC current gain	$h_{FE}$	$I_C = -50\text{ mA}; V_{CE} = -10\text{ V}$	30		120	
collector-emitter saturation voltage	$V_{CEsat}$	$I_C = -50\text{ mA}; I_B = -5\text{ mA}$			-2	V
collector capacitance	$C_c$	$I_E = I_C = 0; V_{CB} = -10\text{ V}; f = 1\text{ MHz}$			15	pF
transition frequency	$f_T$	$I_C = -10\text{ mA}; V_{CE} = -10\text{ V}; f = 100\text{ MHz}$	15			MHz