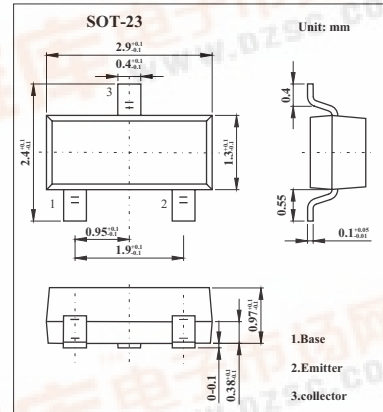


SMD Type Transistors

PNP Silicon Switching Transistors
BSS80, BSS82

■ Features

- High DC current gain: 0.1mA to 500 mA.
- Low collector-emitter saturation voltage.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	BSS80	BSS82	Unit
Collector-emitter voltage	V _{CEO}	40	60	V
Collector-base voltage	V _{CB0}	60		V
Emitter-base voltage	V _{EB0}	5		V
Collector current	I _c	800		mA
Peak collector current	I _{CM}	1		A
Base current	I _B	100		mA
Peak base current	I _{BM}	200		mA
Total power dissipation, T _s = 77°C	P _{tot}	330		mW
Junction temperature	T _j	150		°C
Storage temperature	T _{stg}	-65 to +150		°C
Junction - soldering point	R _{thJS}	≤220		K/W

BSS80, BSS82

■ Electrical Characteristics Ta = 25°C

Parameter		Symbol	Testconditions	Min	Typ	Max	Unit
Collector-emitter breakdown voltage	BSS80	V _{(BR)CEO}	I _C = 10 mA, I _B = 0	40			V
	BSS82			60			
Collector-base breakdown voltage		V _{(BR)CBO}	I _C = 10 μA, I _E = 0	60			V
Emitter-base breakdown voltage		V _{(BR)EBO}	I _E = 10 μA, I _C = 0	5			V
Collector cutoff current		I _{CBO}	V _{CB} = 50 V, I _E = 0			10	nA
			V _{CB} = 50 V, I _E = 0, T _A = 150°C			10	μA
Emitter cutoff current		I _{EBO}	V _{EB} = 3 V, I _C = 0			10	nA
DC current gain *	BSS80/82B	h _{FE}	I _C = 100 μA, V _{CE} = 10 V	40			
	BSS80/82C			75			
	BSS80/82B		I _C = 1 mA, V _{CE} = 10 V	40			
	BSS80/82C			100			
	BSS80/82B		I _C = 10 mA, V _{CE} = 10 V	40			
	BSS80/82C			100			
	BSS80/82B		I _C = 150 mA, V _{CE} = 10 V	40		120	
	BSS80/82C			100		300	
	BSS80/82B		I _C = 500 mA, V _{CE} = 10 V	40			
	BSS80/82C			50			
Collector-emitter saturation voltage *		V _{CE(sat)}	I _C = 150 mA, I _B = 15 mA			0.4	V
			I _C = 500 mA, I _B = 50 mA			1.6	
Base-emitter saturation voltage *		V _{BE(sat)}	I _C = 150 mA, I _B = 15 mA			1.3	
			I _C = 500 mA, I _B = 50 mA			2.6	
Transition frequency		f _T	I _C = 20 mA, V _{CE} = 20 V, f = 100 MHz		250		MHz
Collector-base capacitance		C _{cb}	V _{CB} = 10 V, f = 1 MHz		6		pF
Delay time		t _d	V _{CC} = 30 V, I _C = 150 mA, I _{B1} = 15 mA, V _{BE(off)} = 0.5 V			10	ns
Rise time		t _r	V _{CC} = 30 V, I _C = 150 mA, I _{B1} = 15 mA, V _{BE(off)} = 0.5 V			40	ns
Storage time		t _{stg}	V _{CC} = 30 V, I _C = 150 mA, I _{B1} = I _{B2} = 15 mA,			80	ns
Fall time		t _f	V _{CC} = 30 V, I _C = 150 mA, I _{B1} = I _{B2} = 15 mA,			30	ns

* Pulse test: t ≤ 300μs, D = 2%.

■ hFE Classification

TYPE	BSS80	
Rank	B	C
Marking	CHs	CJs

TYPE	BSS82	
Rank	B	C
Marking	CLs	CMs