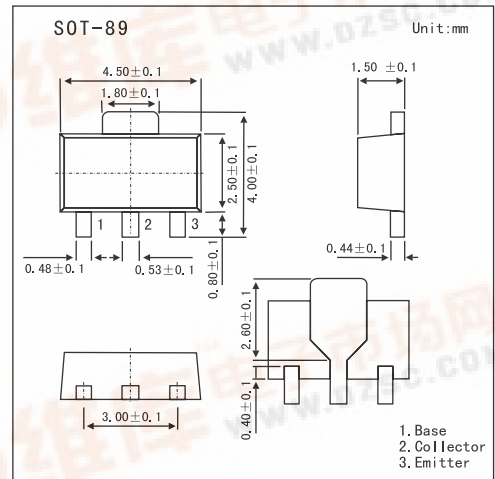


SMD Type Transistors

PNP Silicon Epitaxial Transistor  
2SB1628

■ Features

- High current capacitance.
- Low collector saturation voltage.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V <sub>CBO</sub>	-20	V
Collector to Emitter Voltage	V <sub>CEO</sub>	-16	V
Emitter to Base Voltage	V <sub>EBO</sub>	-6	V
Collector Current (DC)	I <sub>C(DC)</sub>	-3	A
Collector Current (pulse) *	I <sub>C(Pulse)</sub>	-5	A
Base Current (DC)	I <sub>B(DC)</sub>	-0.2	A
Base Current (pulse) *	I <sub>B(Pulse)</sub>	-0.4	A
Total Power Dissipation	P <sub>T</sub>	2	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

\* PW ≤ 10 ms, Duty Cycle ≤ 50%

## 2SB1628

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector Cut-off Current	IcBO	VcBO = -20 V, Ie = 0			-100	nA
Emitter Cut-off Current	IeBO	VEBO = -6.0 V, Ic = 0			-100	nA
DC Current Gain *	hFE1	VCE = -2.0 V, Ic = -0.5 A	140	280	560	
	hFE2	VCE = -2.0 V, Ic = -3.0 A	70			
Base to Emitter Voltage *	VBE	VCE = -2.0 V, Ic = -0.05 A	-600	-660	-700	mV
Collector Saturation Voltage *	VCE(sat)1	Ic = -2.0 A, Ib = -0.1 A		-240	-350	mV
Collector Saturation Voltage *	VCE(sat)2	Ic = -3.0 A, Ib = -0.15 A		-350	-550	mV
Base Saturation Voltage *	VBE(sat)	Ic = -2.0 A, Ib = -0.1 A		-0.95	-1.2	V
Gain Bandwidth Product	fT	VCE = □3.0 V, Ie = 0.5 A		320		MHz
Output Capacitance	Cob	VcB = □10 V, Ie = 0, f = 1 MHz		45		pF
Turn-on Time	ton	Ic = -1.0 A, Vcc = -10 V, RL = 5.0 Ω, Ib1 = -Ib2 = -0.1 A,		70		ns
Storage Time	tstg			110		ns
Fall Time	tf			40		ns

\* Pulsed: PW ≤ 350 μs, Duty Cycle ≤ 2%.

### ■ hFE Classification

Marking	ZX	ZY	ZZ
hFE	140~280	200~400	280~560