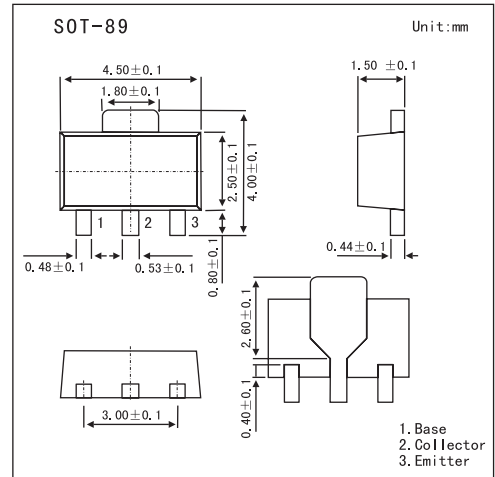


2SB1628

■ Features

- High current capacitance.
- Low collector saturation voltage.



■ Absolute Maximum Ratings Ta = 25°C

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

* PW ≤ 10 ms, Duty Cycle ≤ 50%

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■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector Cut-off Current	ICBO	V _{CB0} = -20 V, I _E = 0			-100	nA
Emitter Cut-off Current	IEBO	V _{EB0} = -6.0 V, I _C = 0			-100	nA
DC Current Gain *	hFE1	V _{CE} = -2.0 V, I _C = -0.5 A	140	280	560	
	hFE2	V _{CE} = -2.0 V, I _C = -3.0 A	70			
Base to Emitter Voltage *	V _{BE}	V _{CE} = -2.0 V, I _C = -0.05 A	-600	-660	-700	mV
Collector Saturation Voltage *	V _{CE(sat)1}	I _C = -2.0 A, I _B = -0.1 A		-240	-350	mV
Collector Saturation Voltage *	V _{CE(sat)2}	I _C = -3.0 A, I _B = -0.15 A		-350	-550	mV
Base Saturation Voltage *	V _{BE(sat)}	I _C = -2.0 A, I _B = -0.1 A		-0.95	-1.2	V
Gain Bandwidth Product	f _T	V _{CE} = □3.0 V, I _E = 0.5 A		320		MHz
Output Capacitance	C _{ob}	V _{CB} = □10 V, I _E = 0, f = 1 MHz		45		pF
Turn-on Time	t _{on}	I _C = -1.0 A, V _{CC} = -10 V, R _L = 5.0 Ω, I _{B1} = -I _{B2} = -0.1 A,		70		ns
Storage Time	t _{stg}			110		ns
Fall Time	t _f			40		ns

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

■ hFE Classification

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