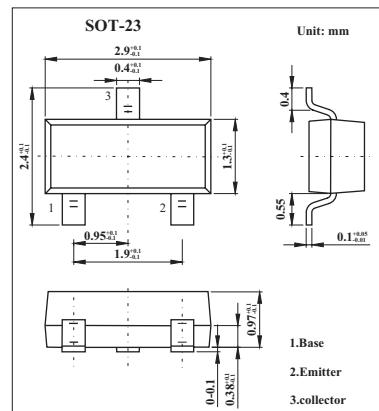


## ■ Features

- Possible with the small current and low voltage
- High transition frequency  $f_T$
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	10	V
Collector-emitter voltage	$V_{CEO}$	7	V
Emitter-base voltage	$V_{EBO}$	2	V
Collector current	$I_C$	10	mA
Collector power dissipation	$P_C$	50	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

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

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = 10 \text{ V}, I_E = 0$			1	µA
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 1.5 \text{ V}, I_C = 0$			1	µA
Forward current transfer ratio	$h_{FE}$	$V_{CE} = 1 \text{ V}, I_C = 1 \text{ mA}$	50		150	
Transition frequency	$f_T$	$V_{CE} = 1 \text{ V}, I_C = 1 \text{ mA}, f = 0.8 \text{ GHz}$		4		GHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 1 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		0.4		pF
Forward transfer gain	$ S_{21e} ^2$	$V_{CE} = 1 \text{ V}, I_C = 1 \text{ mA}, f = 0.8 \text{ GHz}$		6.0		dB
Maximum unilateral power gain	$G_{UM}$	$V_{CE} = 1 \text{ V}, I_C = 1 \text{ mA}, f = 0.8 \text{ GHz}$		15		dB
Noise figure	NF	$V_{CE} = 1 \text{ V}, I_C = 1 \text{ mA}, f = 0.8 \text{ GHz}$		3.5		dB

## ■ Marking

Marking	2X
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