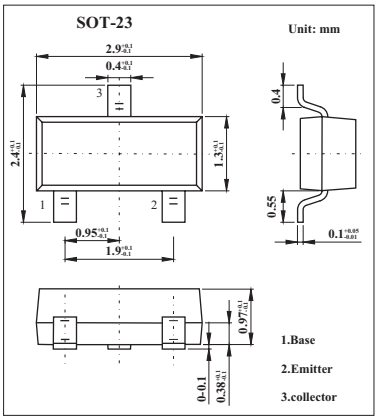
TY Semicondutor®

Product specification

2SB831



■ Features

● Low frequency amplifier.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-25	V
Collector to emitter voltage	V_{CEO}	-20	V
Emitter to base voltage	V_{EBO}	-5	V
Collector current	I_C	-0.7	A
peak collector current	I_{CP}	1	A
Collector power dissipation	P_C	150	mW
Junction temperature	Tj	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	I_C = -10 μA, I_E = 0	-25			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	I_C = -1 mA, R_{BE} = ∞	-20			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	I_E = -10 μA, I_C = 0	-5			V
Collector cutoff current	I_{CBO}	V_{CB} = -20 V, I_E = 0			-1	mA
DC current transfer ratio *	h_{FE}	V_{CE} = -1 V, I_C = -0.15 A	85		240	
Collector to emitter saturation voltage *	$V_{CE(sat)}$	I_C = -0.5 A, I_B = -0.05 A			-0.5	V
Base to emitter voltage *	V_{BE}	V_{CE} = -1 V, I_C = -0.15 A			-1	V

* Pulse test.

■ h_{FE} Classification

Marking	BB	BC
hFE	85～170	120～240