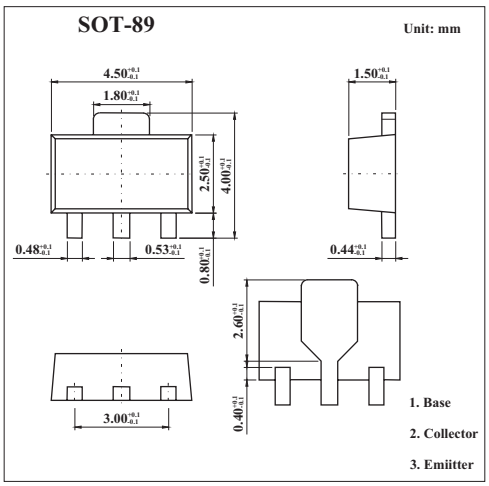
TY Semicondutor®

Product specification

2SA1890



■ Features

- Low collector-emitter saturation voltage VCE(sat)
- High collector-emitter voltage (Base open) VCEO

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-50	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-50	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base voltage	V_{CBO}	I_C = -10 μA, I_E = 0	-80			V
Collector-emitter voltage	V_{CEO}	I_C = -1 mA, I_B = 0	-80			V
Emitter-base voltage	V_{EBO}	I_E = -10 μA, I_C = 0	-5			V
Collector-base cutoff current	I_{CBO}	V_{CB} = -40 V, I_E = 0			-0.1	μA
Forward current transfer ratio	h_{FE}	V_{CE} = -2 V, I_C = -100 mA	120		340	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = -500 mA, I_B = -50 mA		-0.2	-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C = -500 mA, I_B = -50 mA		-0.85	-1.2	V
Transition frequency	f_T	V_{CB} = -10 V, I_E = 50 mA, f = 200 MHz		120		MHz
Collector output capacitance	C_{ob}	V_{CB} = -10 V, I_E = 0, f = 1 MHz		15	30	pF

■ h_{FE} Classification

Marking	1Z	
Rank	R	S
h_{FE}	120～240	170～340