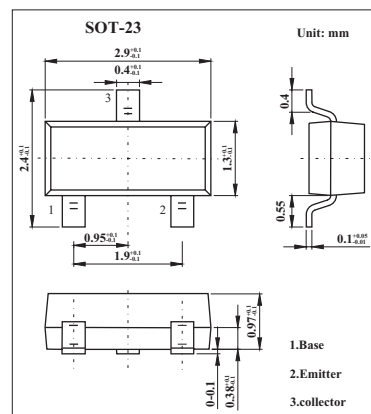


PNP Epitaxial Planar Silicon Transistors

2SA1839

■ Features

- Very small-sized package permitting 2SA1839-applied sets to be made small and slim
- Small output capacitance.
- Low collector-to-emitter saturation voltage
- Low ON resistance

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-15	V
Collector-emitter voltage	V_{CEO}	-10	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-100	mA
Collector current (pulse)	I_{CP}	-200	mA
Base current	I_B	-20	mA
Collector dissipation	P_C	250	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I_{cB0}	$V_{CB} = -12V, I_E = 0$			-0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4V, I_C = 0$			-0.1	μA
DC current Gain	h_{FE}	$V_{CE} = -2V, I_C = -5\text{mA}$	200		600	
Gain bandwidth product	f_T	$V_{CE} = -5V, I_C = -10\text{mA}$		600		MHz
Common base output capacitance	C_{ob}	$V_{CB} = -10V, f = 1\text{MHz}$		0.9		pF
Collector-to-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$		-0.04	-0.15	mV
Base-to-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$		-0.82	-1.1	V
Collector-to-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-15			V
Collector-to-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-10			V
Emitter-to-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}, I_C = 0$	-15			V
ON Resistance	R_{on}	$I_B = -3\text{mA}, f = 1\text{MHz}$		3.0		Ω

■ Marking

Marking	LS
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