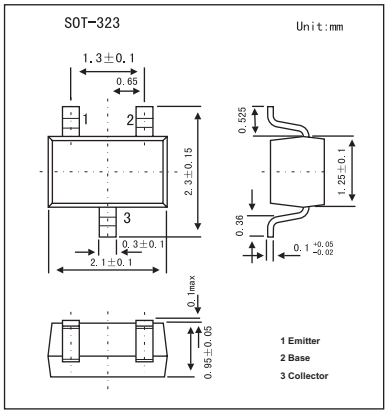
Silicon PNP Epitaxial Planar Type

2SA1739



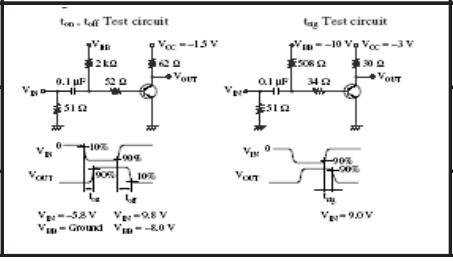
■ Features

- High speed switching.
- Low collector-emitter saturation voltage $V_{CE(sat)}$.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-15	V
Collector-emitter voltage	V_{CEO}	-15	V
Emitter-base voltage	V_{EBO}	-4	V
Collector current	I_C	-50	mA
Peak collector current	I_{CP}	-100	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 cutoff current	I_{CBO}	V_{CB} = -8 V, I_E = 0			-0.1	μA
Emitter-base cutoff current	I_{EBO}	V_{CE} = -3 V, I_C = 0			-0.1	μA
Forward current transfer ratio	h_{FE}	V_{CE} = -1 V, I_C = -10 mA	50		150	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = -10 mA, I_B = -1 mA		-0.1	-0.2	V
Transition frequency	f_T	V_{CB} = -10 V, I_E = 10 mA, f = 200 MHz	800	1500		MHz
Collector output capacitance	C_{ob}	V_{CB} = -5 V, I_E = 0, f = 1 MHz		1		pF
Turn-on time	t_{on}			12		ns
Turn-off time	t_{off}			20		ns
Storage time	t_{stg}			19		ns

■ h_{FE} Classification

Marking	AX		
Rank	Q	R	No-rank
h_{FE}	50～120	90～150	50～150