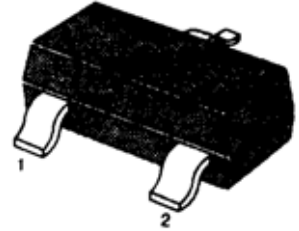


**■■ APPLICATION:** Interface Circuit and Driver Circuit Applications.

**■■ MAXIMUM RATINGS** ( $T_a=25^\circ\text{C}$ )

SOT-323

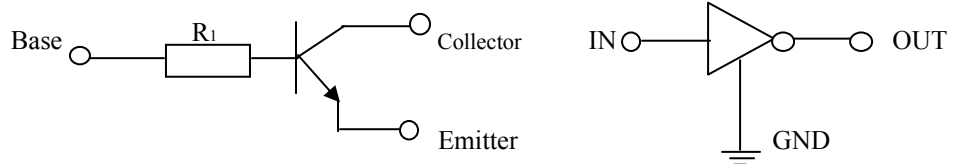
PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	$V_{CB0}$	50	V
Collector-emitter voltage	$V_{CEO}$	50	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	100	mA
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55~150	$^\circ\text{C}$



1.Base 2.Emitter 3.Collector

**■■ ELECTRICAL CHARACTERISTICS** ( $T_a=25^\circ\text{C}$ )

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	$h_{FE}$	100	250	600		$V_{CE}=5\text{V}$ , $I_C=1\text{mA}$
Input Voltage	$R_1$	70	100	130	$\text{K}\Omega$	
Collector Cut-off Current	$I_{CB0}$			0.5	$\mu\text{A}$	$V_{CB}=50\text{V}$ , $I_E=0$
Emitter Cut-off Current	$I_{EBO}$			0.5	$\mu\text{A}$	$V_{EB}=4\text{V}$ , $I_C=0$
Collector-Base Breakdown Voltage	$BV_{CB0}$	50			V	$I_C=0.05\text{mA}$ , $I_E=0$
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	50			V	$I_C=1\text{mA}$ , $I_B=0$
Emitter-Base Breakdown Voltage	$BV_{EBO}$	5			V	$I_E=0.05\text{mA}$ , $I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.3	V	$I_C=1\text{mA}$ , $I_B=0.1\text{mA}$
Gain bandwidth product	$f_T$	150	250		MHz	$I_C=5\text{mA}$ , $V_{CE}=10\text{V}$ , $f=100\text{MHz}$


**■■  $h_{FE}$  Classification And Marking**

Print Mark	09Q	09R	09S
Classification	Q	R	S
$h_{FE}$	100~270	180~390	270~600