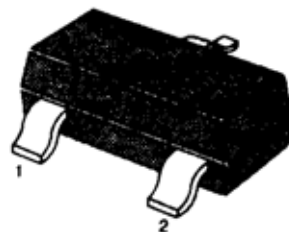


APPLICATION: Interface Circuit and Driver Circuit Applications.

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

SOT-323

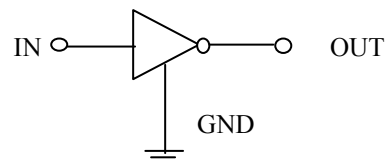
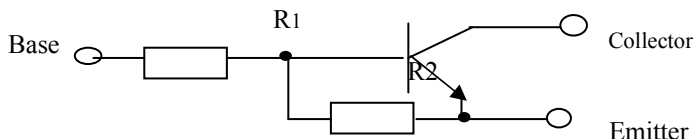
PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	10	V
Collector current	I_C	100	mA
Collector Power Dissipation	P_C	100	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^\circ\text{C}$



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}	80				$V_{CE}=5V, I_C=10mA$
Collector Cut-off Current	I_{CBO}			0.1	μA	$V_{CB}=50V, I_E=0$
Collector-Emitter Cut-off Current	I_{CEO}			0.5	μA	$V_{CB}=50V, I_E=0$
Emitter Cut-off Current	I_{EBO}	0.082		0.15	mA	$V_{EB}=10V, I_C=0$
Input Voltage (ON)	$V_{I(ON)}$	1.5		5	V	$V_{CE}=0.2V, I_C=5mA$
Output Voltage (OFF)	$V_{I(OFF)}$	1		1.5	V	$V_{CE}=5V, I_C=0.1mA$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		0.1	0.3	V	$I_C=5mA, I_B=0.25mA$
Gain bandwidth product	f_T	100	250		MHz	$I_C=5mA, V_{CE}=10V$
Base Resistance	R_1	32.9	47	61.1	$\text{K}\Omega$	
Emitter Resistance	R_2	32.9	47	61.1		
Common Base Output Capacitance	C_{ob}		3	6	pF	$V_{CB}=10V, I_E=0, f=1MHz$


h_{FE} Classification And Marking

Print Mark

XD

Classification

 h_{FE}
 ≥ 80