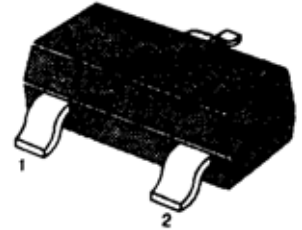


**■ ■ APPLICATION:** Switching and Amplifier Applications.

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

SOT-323

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	$V_{CB0}$	-50	V
Collector-emitter voltage	$V_{CE0}$	-45	V
Emitter-base voltage	$V_{EB0}$	-5	V
Collector current	$I_C$	-500	mA
Collector Power Dissipation	$P_C$	300	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	$h_{FE1}$	100		630		$V_{CE}=-1\text{V}$ , $I_C=-100\text{mA}$
	$h_{FE2}$	40				$V_{CE}=-1\text{V}$ , $I_C=-300\text{mA}$
Collector Cut-off Current	$I_{CB0}$			-0.1	$\mu\text{A}$	$V_{CB}=-45\text{V}$ , $I_E=0$
Emitter Cut-off Current	$I_{EB0}$			-0.1	$\mu\text{A}$	$V_{EB}=-4\text{V}$ , $I_C=0$
Collector-Base Breakdown Voltage	$BV_{CB0}$	-50			V	$I_C=-0.1\text{mA}$ , $I_E=0$
Collector-Emitter Breakdown Voltage	$BV_{CE0}$	-45			V	$I_C=-10\text{mA}$ , $I_B=0$
Emitter-Base Breakdown Voltage	$BV_{EB0}$	-5			V	$I_E=-0.1\text{mA}$ , $I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.7	V	$I_C=-500\text{mA}$ , $I_B=-50\text{mA}$
Gain bandwidth product	$f_T$	50	100		MHz	$I_C=-10\text{mA}$ , $V_{CE}=-5\text{V}$ , $f=50\text{MHz}$
Common Base Output Capacitance	$C_{ob}$			12	PF	$V_{CB}=-10\text{V}$ , $I_E=0$ , $f=1\text{MHz}$

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

Print Mark	5Cr	5Cs	5Ct
Classification	16	25	40
$h_{FE1}$	100~250	160~400	250~630