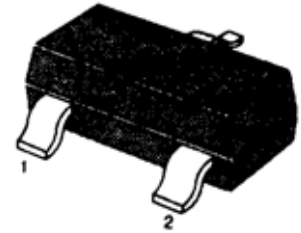


**■ APPLICATION:** General purpose applications.

**■ MAXIMUM RATINGS** (Ta=25°C)

SOT-323

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CB0</sub>	-30	V
Collector-emitter voltage	V <sub>CEO</sub>	-30	V
Emitter-base voltage	V <sub>EBO</sub>	-5	V
Collector current	I <sub>C</sub>	-100	mA
MAX.Collector Current	I <sub>CM</sub>	-200	mA
MAX.Base Current	I <sub>BM</sub>	-200	mA
Collector Power Dissipation	P <sub>C</sub>	200	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C



1.Base 2.Emitter 3.Collector

**■ ELECTRICAL CHARACTERISTICS** (Ta=25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
DC Current Gain	h <sub>FE</sub>	125		800		V <sub>CE</sub> = -5V, I <sub>C</sub> = -2mA
Collector Cut-off Current	I <sub>CB0</sub>			-0.015	μA	V <sub>CB</sub> = -30V, I <sub>E</sub> =0
Emitter Cut-off Current	I <sub>EBO</sub>			-0.1	μA	V <sub>EB</sub> = -5V, I <sub>C</sub> =0
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	-30			V	I <sub>C</sub> = -0.1mA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	-30			V	I <sub>C</sub> = -1mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	-5			V	I <sub>E</sub> = -0.1mA, I <sub>C</sub> =0
Base-Emitter Voltage	V <sub>BE</sub>	-0.6		-0.75	V	V <sub>CE</sub> = -5V, I <sub>C</sub> = -2mA
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>		-0.075	-0.3	V	I <sub>C</sub> = -10mA, I <sub>B</sub> = -0.5mA
	V <sub>CE(sat)</sub>		-0.25	-0.6	V	I <sub>C</sub> = -100mA, I <sub>B</sub> = -5mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>		-0.7		V	I <sub>C</sub> = -10mA, I <sub>B</sub> = -0.5mA
	V <sub>BE(sat)</sub>		-0.85		V	I <sub>C</sub> = -100mA, I <sub>B</sub> = -5mA
Gain bandwidth product	f <sub>T</sub>	100			MHZ	I <sub>C</sub> = -10mA, V <sub>CE</sub> = -5V, f = 100MHz
Common Base Output Capacitance	C <sub>ob</sub>			3	pF	V <sub>CB</sub> = -10V, I <sub>E</sub> =0, f = 1MHz
Noise Figure	N <sub>F</sub>			10	dB	I <sub>C</sub> = -0.2mA, V <sub>CE</sub> = -5V, f= 1KHz, R <sub>g</sub> = 2KΩ

**■ h<sub>FE</sub> Classification And Marking**

Print Mark                      3M

Classification

 h<sub>FE</sub>                                125~800