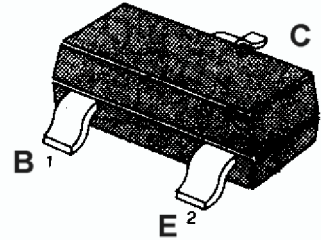


APPLICATION: GENERAL PURPOSE AMPLIFIER APPLICATION,  
SWITCHING APPLICATION.

**MAXIMUM RATINGS** (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CB0</sub>	40	V
Collector-emitter voltage	V <sub>CEO</sub>	25	V
Emitter-base voltage	V <sub>EBO</sub>	6	V
Collector current	I <sub>C</sub>	800	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

**SOT-23**


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>	85		300		V <sub>CE</sub> = 1 V, I <sub>C</sub> = 100 mA
Collector Cut-off Current	I <sub>CB0</sub>			0.1	μA	V <sub>CB</sub> = 35 V, I <sub>E</sub> =0
Emitter Cut-off Current	I <sub>EBO</sub>			0.1	μA	V <sub>EB</sub> = 6 V, I <sub>C</sub> =0
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	40			V	I <sub>C</sub> = 0.1 mA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	25			V	I <sub>C</sub> = 2 mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	6			V	I <sub>E</sub> = 0.1 mA, I <sub>C</sub> =0
Base-Emitter Voltage	V <sub>BE</sub>			1	V	V <sub>CE</sub> = 1V, I <sub>C</sub> = 10 mA
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>			0.5	V	I <sub>C</sub> = 500 mA, I <sub>B</sub> = 50 mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>			1.2	V	I <sub>C</sub> =500 mA, I <sub>B</sub> = 50 mA
Gain bandwidth product	f <sub>T</sub>	100			MHz	I <sub>C</sub> = 50 mA, V <sub>CE</sub> = 10 V
Common Base Output Capacitance	C <sub>ob</sub>		9	20	PF	V <sub>CB</sub> = 10 V, I <sub>E</sub> =0, f = 1 MHz

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

Print Mark	S5B	S5C	S5D
Classification	B	C	D
h <sub>FE</sub>	85~160	120~200	160~300