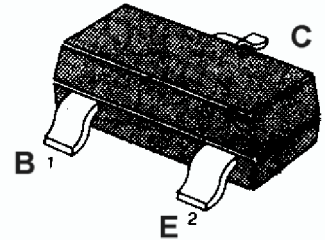


**APPLICATION:**General purpose application. Switching application.

**MAXIMUM RATINGS** (Ta=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V <sub>CB0</sub>	-50	V
Collector-emitter voltage	V <sub>CEO</sub>	-40	V
Emitter-base voltage	V <sub>EBO</sub>	-5	V
Collector current	I <sub>c</sub>	-100	mA
Collector Power Dissipation	P <sub>c</sub>	150	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>	60		600		V <sub>CE</sub> = -5 V, I <sub>c</sub> = -1 mA
Collector Cut-off Current	I <sub>CB0</sub>			-0.1	μA	V <sub>CB</sub> =-50 V, I <sub>E</sub> =0
Emitter Cut-off Current	I <sub>EBO</sub>			-0.1	μA	V <sub>EB</sub> = -5 V, I <sub>c</sub> =0
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	-50			V	I <sub>c</sub> =-0.1 mA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	-40			V	I <sub>c</sub> =-1 mA, 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(ON)</sub>			-0.75	V	V <sub>CE</sub> =-5 V, I <sub>c</sub> = -2mA
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>			-0.3	V	I <sub>c</sub> =-100 mA, I <sub>B</sub> =-10 mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>			-1	V	I <sub>c</sub> =-100 mA, I <sub>B</sub> =-10 mA
Gain bandwidth product	f <sub>T</sub>	100	190		MHz	I <sub>c</sub> = -10 mA, V <sub>CE</sub> =-5 V
Common Base Output Capacitance	C <sub>ob</sub>		4.5	7	PF	V <sub>CB</sub> = -10V, I <sub>E</sub> =0, f= 1 MHz
Noise Figure	N <sub>F</sub>			10	dB	V <sub>CE</sub> = -5 V, I <sub>c</sub> =-0.2 mA, f=1KHz, R <sub>g</sub> = 1KΩ

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

Print Mark	15A	15B	15C
Classification	A	B	C
h <sub>FE</sub>	60~150	100~300	200~600