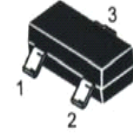


## SOT-23 Plastic-Encapsulate Transistors FEATURES

- ◆ High voltage and high current  
VCEO=-50V(min.),IC=-150mA(max.)
- ◆ Excellent hFE Linearity  
hFE (2)=80(Typ.) at VCE=-6V,IC=-150mA  
hFE (IC=-0.1mA)/hFE(IC=-2mA)=0.95(Typ.)
- ◆ Low noise :NF=1dB(Typ)atf=1KHZ
- ◆ Complementary to C1815

SOT-23



- 1、BASE
- 2、EMITTER
- 3、COLLECTOR

### MARKING: BA

### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
<b>VCBO</b>	Collector-Base Voltage	-50	V
<b>VCEO</b>	Collector-Emitter Voltage	-50	V
<b>VEBO</b>	Emitter-Base Voltage	-5	V
<b>IC</b>	Collector Current -Continuous	150	mA
<b>PC</b>	Collector Power Dissipation	200	mW
<b>TJ</b>	Junction Temperature	125	°C
<b>Tstg</b>	Storage Temperature	-55-125	°C

### ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
<b>Collector-base breakdown voltage</b>	V(BR)CBO	IC= -100u A, IE=0	-50			V
<b>Collector-emitter breakdown voltage</b>	V(BR)CEO	IC= -0.1mA, IB=0	-50			V
<b>Emitter-base breakdown voltage</b>	V(BR)EBO	IE= -100 u A, IC=0	-5			V
<b>Collector cut-off current</b>	ICBO	VCB=-50V, IE=0			-0.1	u A
<b>Collector cut-off current</b>	ICEO	VCE= -50V, IB=0			-0.1	u A
<b>Emitter cut-off current</b>	IEBO	VEB=- 5V, IC=0			-0.1	u A
<b>DC current gain</b>	hFE	VCE=-6V, IC= -2mA	130		400	
<b>Collector-emitter saturation voltage</b>	VCE(sat)	IC=-100 mA, IB= -10mA			-0.3	V
<b>Base-emitter saturation voltage</b>	VBE(sat)	IC=-100 mA, IB= -10mA			-1.1	V
<b>Transition frequency</b>	fT	VCE=-10V, IC= -1mA f=30MHz	80			MHz

### CLASSIFICATION OF hFE

Rank	L	H
<b>Range</b>	130-200	200-400

# Typical Characteristics

# A1015

