



1. BASE
2. EMITTER
3. COLLECTOR

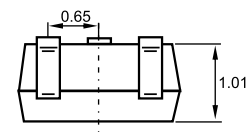
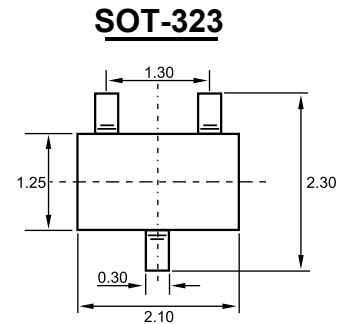
## Features

- ◇ Ideally suited for automatic insertion
- ◇ epitaxial planar die construction
- ◇ complementary to BC817W

**MARKING: 16W:5A; 25W:5B; 40W:5C**

**MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)**

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	-50	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-45	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-0.5	A
P <sub>C</sub>	Collector Power Dissipation	0.2	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55-150	°C



Dimensions in inches and (millimeters)

## ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> = -10μA, I <sub>E</sub> =0	-50		V
Collector-emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = -10mA, I <sub>B</sub> =0	-45		V
Emitter-base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -1μA, I <sub>C</sub> =0	-5		V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = -20 V, I <sub>E</sub> =0		-0.1	μA
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> = -20 V, I <sub>B</sub> =0		-0.2	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5 V, I <sub>C</sub> =0		-0.1	μA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> = -1V, I <sub>C</sub> = -100mA	100	250	
			160	400	
DC current gain	h <sub>FE(2)</sub>	V <sub>CE</sub> = -1V, I <sub>C</sub> = -500mA	250	600	
			40		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-500mA, I <sub>B</sub> = -50 mA		-0.7	V
Base-emitter voltage	V <sub>BE(on)</sub>	V <sub>CE</sub> = -1V, I <sub>C</sub> = -500mA		-1.2	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -5 V, I <sub>C</sub> = -10mA f=100MHz	80		MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-10V,f=1MHz		10	pF

## Typical Characteristics

