



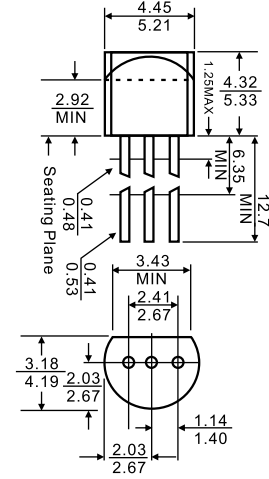
1. EMITTER
2. COLLECTOR
3. BASE

## Features

- ◇ High current transistors

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

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	BC636 -45 BC638 -60 BC640 -100	V
	Collector-Emitter Voltage	BC636 -45 BC638 -60 BC640 -80	V
	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-1	A
P <sub>C</sub>	Collector Power Dissipation	0.83	W
R <sub>θJA</sub>	Thermal Resistance, junction to Ambient	150	°C/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	TYP	MAX	UNIT	
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-100μA, I <sub>E</sub> =0	BC636 -45 BC638 -60 BC640 -100			V	
		Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	BC636 -45 BC638 -60 BC640 -80		V
				Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-100μA, I <sub>C</sub> =0	-5
Collector cut-off current	I <sub>CBO</sub>			V <sub>CB</sub> =-30V, I <sub>E</sub> =0		-0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> =0			- 0.1	μA	
DC current gain	h <sub>FE(1)</sub> h <sub>FE(2)</sub> h <sub>FE(3)</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> =- 5mA	40				
		V <sub>CE</sub> = -2V, I <sub>C</sub> =- 150mA	63		250		
		V <sub>CE</sub> = -2V, I <sub>C</sub> =- 500mA	25				
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =- 500mA, I <sub>B</sub> = -50mA			-0.5	V	
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> = -500mA			- 1	V	
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> =- 50mA, f=100MHZ	100			MHZ	

### CLASSIFICATION OF h<sub>FE(2)</sub>

Rank	BC636-10	BC636-16, BC638-16, BC640-16
Range	63-160	100-250

## Typical Characteristics

