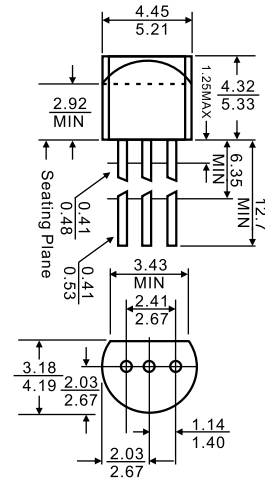




1. EMITTER
2. COLLECTOR
3. BASE

### TO-92



Dimensions in inches and (millimeters)

## Features

- ✧ High voltage
- ✧ Low saturation voltage
- ✧ Small collector output capacitance
- ✧ Complementary to 2SA1091

### MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	300	V
$V_{CEO}$	Collector-Emitter Voltage	300	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current -Continuous	100	mA
$P_C$	Collector power dissipation	400	mW
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55-150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	300			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	300			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	6			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=300\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=6\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}=10\text{V}, I_C=20\text{mA}$	30		150	
	$h_{FE(2)}$	$V_{CE}=10\text{V}, I_C=1\text{mA}$	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=20\text{mA}, I_B=2\text{mA}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=20\text{mA}, I_B=2\text{mA}$			1.2	V
Transition frequency	$f_T$	$V_{CE}=10\text{V}, I_C=20\text{mA}$		80		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=20\text{V}, I_E=0, f=1\text{MHz}$			4	pF

### CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O
Range	30-90	50-150

## Typical Characteristics

