



1. EMITTER
2. COLLECTOR
3. BASE

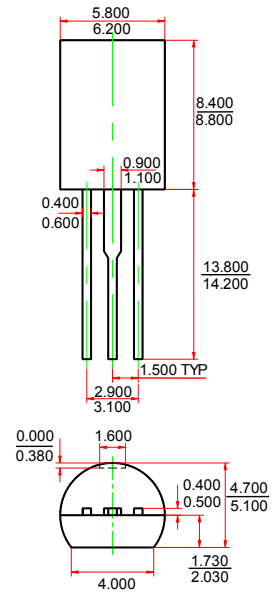
## Features

- ✧ High reverse voltage
- ✧ Low saturation voltage
- ✧ Suitable universal AF power amplifier use

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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-100	V
$V_{CEO}$	Collector-Emitter Voltage	-80	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-0.7	A
$P_C$	Collector Power Dissipation	900	mW
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55-150	$^\circ\text{C}$

### TO-92MOD



Dimensions in inches and (millimeters)

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10 \mu\text{A}$ , $I_E = 0$	-100		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 \text{mA}$ , $I_B = 0$	-80		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10 \mu\text{A}$ , $I_C = 0$	-5		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -20 \text{V}$ , $I_E = 0$		-1	$\mu\text{A}$
Collector cut-off current	$I_{EBO}$	$V_{EB} = -4 \text{V}$ , $I_B = 0$		-1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE} = -5 \text{V}$ , $I_C = -50 \text{mA}$	60	560	
	$h_{FE(2)}$	$V_{CE} = -5 \text{V}$ , $I_C = -500 \text{mA}$	30		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 \text{mA}$ , $I_B = -50 \text{mA}$	-0.3	-0.8	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500 \text{mA}$ , $I_B = -50 \text{mA}$	-0.85	-1.2	V
Transition frequency	$f_T$	$V_{CE} = -10 \text{V}$ , $I_C = -50 \text{mA}$		100	MHz
Out capacitance	$C_{ob}$	$V_{CB} = -10 \text{V}$ , $f = 1 \text{MHz}$		15	pF

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

Rank	D	E	F	G
Range	60 - 120	100 - 200	160 - 320	280 - 560

**Typical Characteristics**
