

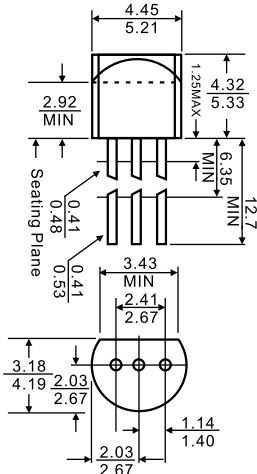
# 2SD1468(NPN)

TO-92 Bipolar Transistors



1. Emitter  
2. Collector  
3. Base

## TO-92



Dimensions in inches and (millimeters)

## Features

- ✧ Low saturation voltage
- ✧ Ideal for low voltage, high current drives
- ✧ High DC current gain and high current

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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	30	V
$V_{CEO}$	Collector-Emitter Voltage	15	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	1	A
$P_c$	Collector power dissipation	625	W
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55-150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu\text{A}, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	15			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu\text{A}, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=20\text{V}, I_E=0$			0.5	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0$			0.5	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=3\text{V}, I_C=100\text{mA}$	120		560	
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C=500\text{mA}, I_B=50\text{mA}$			0.4	V
Transition frequency	$f_T$	$V_{CE}=5\text{V}, I_C=50\text{mA}, f=100\text{MHz}$	50			MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$			30	pF

## CLASSIFICATION OF $h_{FE}$

Rank	Q	R	S
Range	120-270	180-390	270-560

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## Typical Characteristics

