



## TO-92S Plastic-Encapsulate Transistors

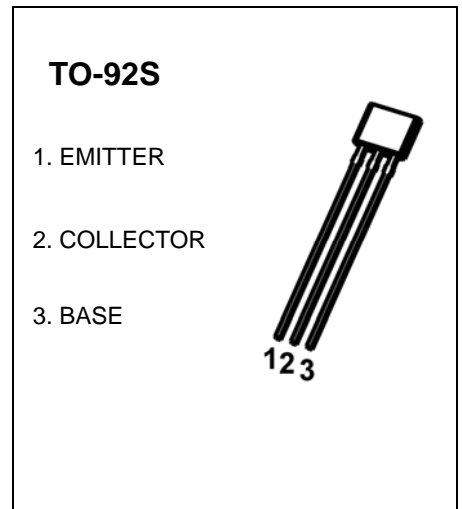
### 2SA1267 TRANSISTOR (PNP)

#### FEATURES

- High  $h_{FE}$
- Excellent  $h_{FE}$  linearing

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

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector- Base Voltage	-50	V
$V_{CEO}$	Collector-Emitter Voltage	-50	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current -Continuous	-0.15	A
$P_C$	Collector Power Dissipation	0.4	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55-150	$^\circ\text{C}$



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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\ \mu\text{A}, I_E=0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\ \mu\text{A}, I_C=0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-50\ \text{V}, I_E=0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\ \text{V}, I_C=0$			-0.1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=-6\ \text{V}, I_C=-2\text{mA}$	70		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$			-0.25	V
Transition frequency	$f_T$	$V_{CE}=-10\ \text{V}, I_C=-1\text{mA}, f=30\text{MHz}$	80			MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10\ \text{V}, I_E=0, f=1\text{KHz}$			3.5	pF
Noise figure	NF	$V_{CE}=-6\ \text{V}, I_C=-0.1\ \text{mA}, f=1\ \text{KHz}, R_g=10\ \text{K}\Omega$			10	dB

#### CLASSIFICATION OF $h_{FE}$

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	300-700