

**Silicon PNP Power Transistor**

**2SA900**

**DESCRIPTION**

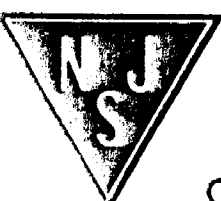
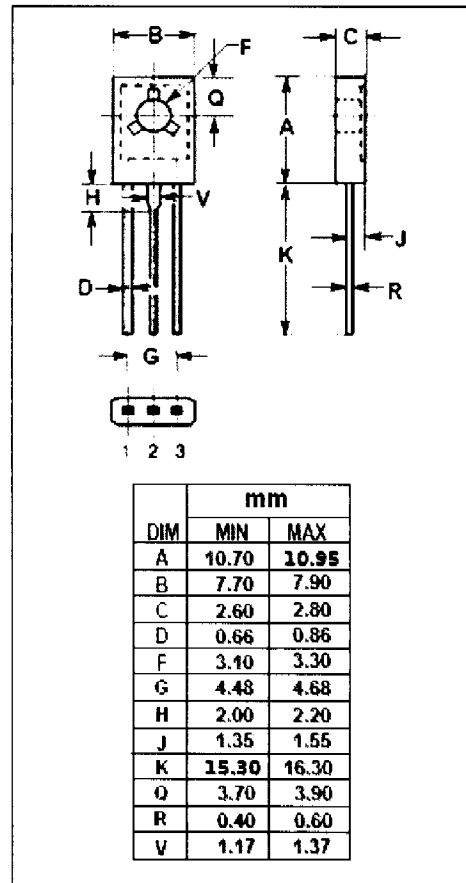
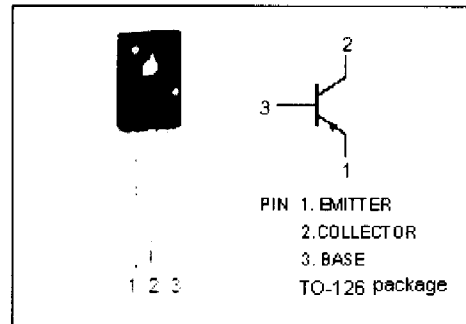
- Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = -18V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Low Collector Saturation Voltage
- Complement to Type 2SC1568

**APPLICATIONS**

- Designed for audio frequency power amplifier applications.

**ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-20	V
$V_{CEO}$	Collector-Emitter Voltage	-18	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-1	A
$I_{CP}$	Collector Current-Pulse	-2	A
$P_C$	Collector Power Dissipation	1.2	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



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# 2SA900

## ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -1\text{mA}; I_B = 0$	-18			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -10\mu\text{A}; I_E = 0$	-20			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -10\mu\text{A}; I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1\text{A}; I_B = -50\text{mA}$			-0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -0.5\text{A}; I_B = -50\text{mA}$			-1.2	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -20\text{V}; I_E = 0$			-1	$\mu\text{A}$
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -18\text{V}; I_B = 0$			-10	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C = -0.5\text{A}; V_{CE} = -2\text{V}$	90		470	
$h_{FE-2}$	DC Current Gain	$I_C = -1.5\text{A}; V_{CE} = -2\text{V}$	50			
$f_T$	Current-Gain—Bandwidth Product	$I_C = -50\text{mA}; V_{CE} = -6\text{V}$		200		MHz
$C_{OB}$	Output Capacitance	$I_E = 0; V_{CB} = -6\text{V}; f_{test} = 1\text{MHz}$		40		pF

### ◆ $h_{FE-1}$ Classifications

Q	R	S	T	U
90-155	130-210	180-280	250-360	330-470