

**Silicon PNP Power Transistor**

**2SA1111**

**DESCRIPTION**

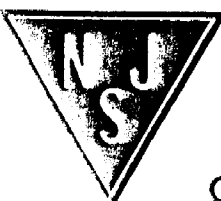
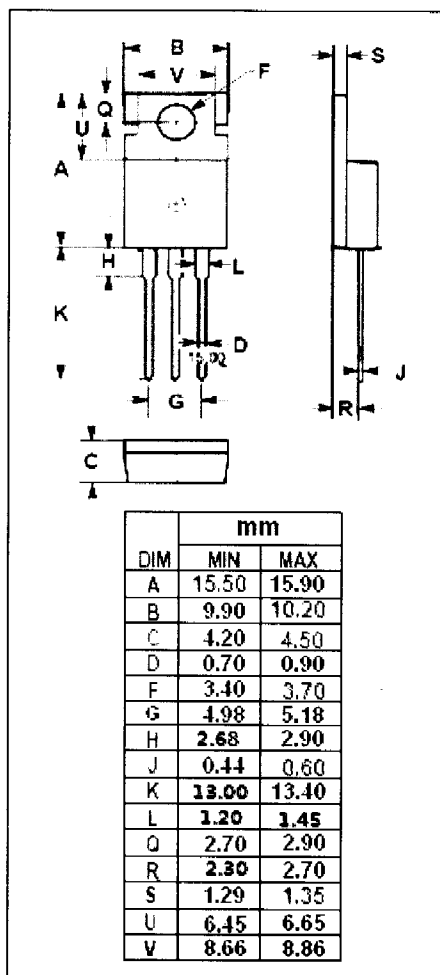
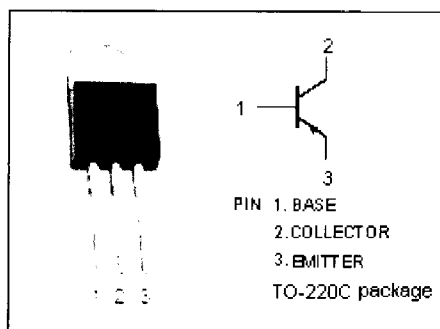
- Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = -150V$  (Min)
- Good Linearity of  $h_{FE}$
- Complement to Type 2SC2591

**APPLICATIONS**

- Designed for audio frequency drivers and high power amplifier applications.

**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-150	V
$V_{CEO}$	Collector-Emitter Voltage	-150	V
$V_{EBO}$	Emitter-Base Voltage	-5.0	V
$I_C$	Collector Current-Continuous	-1	A
$I_{CM}$	Collector Current-Peak	-1.5	A
$P_C$	Collector Power Dissipation	20	W
$T_J$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature Range	-55~150	°C



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## 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	$I_C = -100\mu\text{A}; I_B = 0$	-150			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	$I_C = -500\text{mA}; I_B = -50\text{mA}$			-2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -500\text{mA}; I_B = -50\text{mA}$			-2.0	V
$h_{FE-1}$	DC Current Gain	$I_C = -150\text{mA}; V_{CE} = -10\text{V}$	65		330	
$h_{FE-2}$	DC Current Gain	$I_C = -500\text{mA}; V_{CE} = -5\text{V}$	50			
$f_T$	Current-Gain—Bandwidth Product	$I_E = 50\text{mA}; V_{CE} = -10\text{V}$		200		MHz
$C_{OB}$	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1.0\text{MHz}$		30		pF

### ◆ $h_{FE-1}$ Classifications

P	Q	R	S
65-110	90-155	130-220	185-330