

**Silicon PNP Power Transistor**

**2SA1869**

**DESCRIPTION**

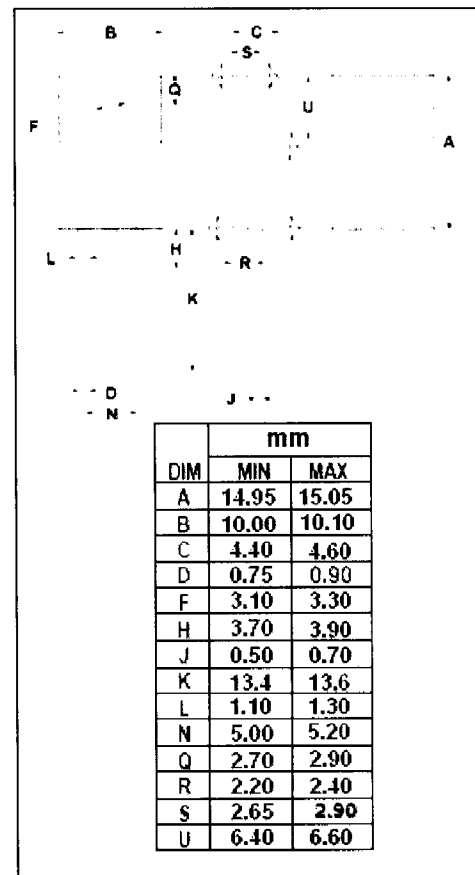
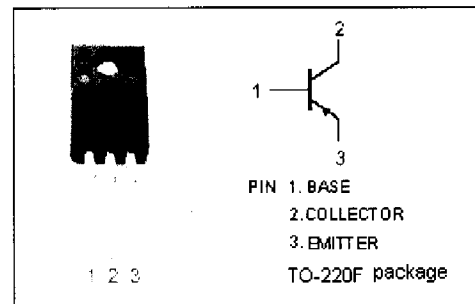
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = -50V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Complement to Type 2SC4935

**APPLICATIONS**

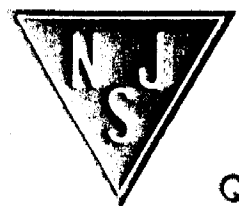
- Designed for power amplifier applications.

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

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	-3	A
$I_B$	Base Current-Continuous	-0.3	A
$P_C$	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	10	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



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### ELECTRICAL CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = -10mA; I <sub>B</sub> = 0	-50			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -2A; I <sub>B</sub> = -0.2A			-0.6	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -2V			-1.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -50V; I <sub>E</sub> = 0			-1.0	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0			-1.0	μ A
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -2V	70		240	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -2.5A; V <sub>CE</sub> = -2V	30			
C <sub>OB</sub>	Collector Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = -10V; f= 1MHz		35		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -0.5A; V <sub>CE</sub> = -2V		100		MHz

#### ◆ h<sub>FE-1</sub> Classifications

O	Y
70-140	120-240