

**Silicon PNP Power Transistor**

**2SA1668**

**DESCRIPTION**

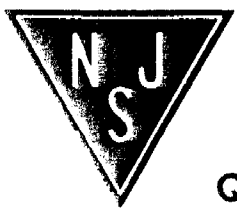
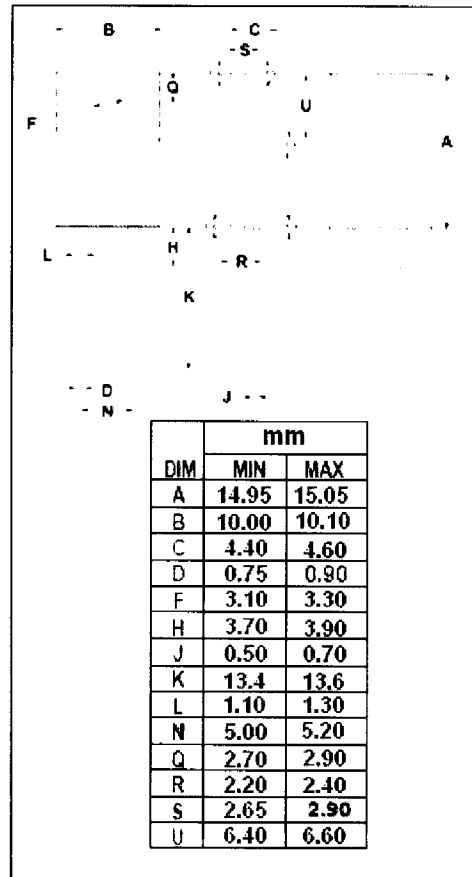
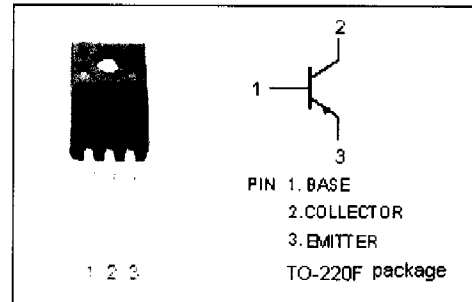
- Collector-Emitter Breakdown Voltage-  
 :  $V_{(BR)CEO} = -200V(\text{Min})$
- DC Current Gain-  
 :  $h_{FE} = 60(\text{Min})@ (V_{CE} = -10V, I_C = -0.7A)$
- Complement to Type 2SC4382

**APPLICATIONS**

- Designed for TV vertical output ,audio output driver and general purpose applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-200	V
$V_{CEO}$	Collector-Emitter Voltage	-200	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current-Continuous	-2	A
$I_B$	Base Current-Continuous	-1	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	25	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

**Quality Semi-Conductors**

# Silicon PNP Power Transistor

# 2SA1668

## 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> = -25mA ; I <sub>B</sub> = 0	-200			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -0.7A ; I <sub>B</sub> = -0.07A			-1.0	V
I <sub>CB0</sub>	Collector Cutoff Current	V <sub>CB</sub> = -200V ; I <sub>E</sub> = 0			-10	μ A
I <sub>EB0</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -6V ; I <sub>C</sub> = 0			-10	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -0.7A ; V <sub>CE</sub> = -10V	60			
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = -10V ; f = 1MHz		60		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> = 0.2A ; V <sub>CE</sub> = -12V		20		MHz

### Switching Times

t <sub>on</sub>	Turn-On Time	I <sub>C</sub> = -1A ; I <sub>B1</sub> = -I <sub>B2</sub> = -0.1A ; V <sub>CC</sub> = -20V ; R <sub>L</sub> = 20Ω		0.4		μ s
t <sub>stg</sub>	Storage Time			1.5		μ s
t <sub>f</sub>	Fall Time			0.5		μ s