

Silicon PNP Power Transistor

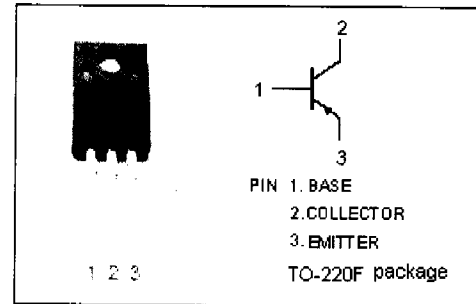
2SA1725

DESCRIPTION

- Low Collector Saturation Voltage
: $V_{CE(sat)} = -0.5(V)(Max) @ I_C = -2A$
- High Switching Speed
- Complement to Type 2SC4511

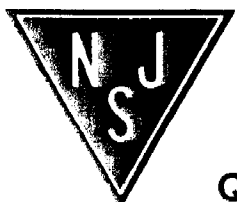
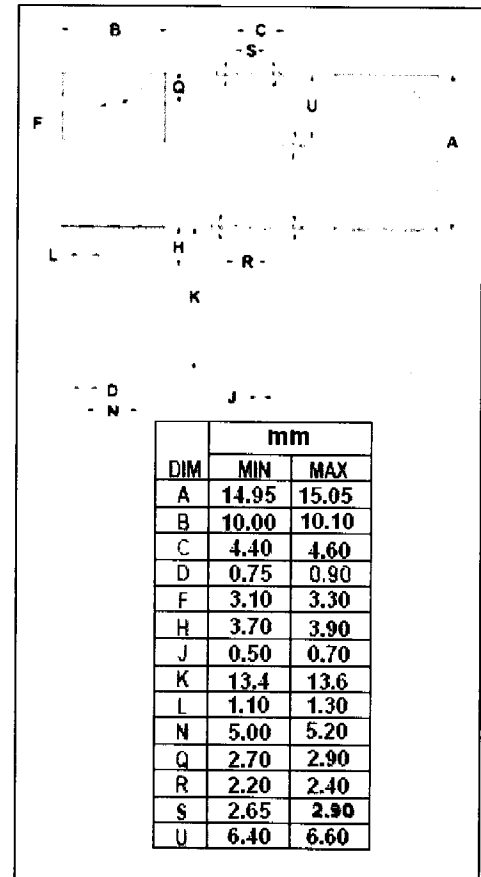
APPLICATIONS

- Designed for audio and general purpose applications.



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-6	A
I_B	Base Collector Current-Continuous	-3	A
P_C	Total Power Dissipation @ $T_C=25^{\circ}C$	30	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



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.

Silicon PNP Power Transistor

2SA1725

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	$I_C = -25\text{mA}$; $I_B = 0$	-80			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -2\text{A}$; $I_B = -0.2\text{A}$			-0.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -80\text{V}$; $I_E = 0$			-10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -6\text{V}$; $I_C = 0$			-10	μA
h_{FE}	DC Current Gain	$I_C = -2\text{A}$; $V_{CE} = -4\text{V}$	50		180	
f_T	Current-Gain—Bandwidth Product	$I_E = 0.5\text{A}$; $V_{CE} = -12\text{V}$		20		MHz
C_{OB}	Output Capacitance	$I_E = 0$; $V_{CB} = -10\text{V}$; $f_{test} = 1\text{MHz}$		150		pF

Switching Times

t_{on}	Turn-on Time	$I_C = -3\text{A}$, $R_L = 10\Omega$, $I_{B1} = -I_{B2} = -0.3\text{A}$, $V_{CC} = -30\text{V}$		0.18		μs
t_{stg}	Storage Time			1.10		μs
t_f	Fall Time			0.21		μs

◆ h_{FE} Classifications

O	P	Y
50-100	70-140	90-180