

Silicon PNP Power Transistor

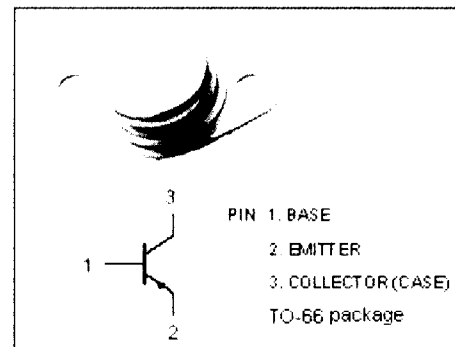
2SA969

DESCRIPTION

- Collector-Emitter Breakdown Voltage
: $V_{(BR)CEO} = -160V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SC2239

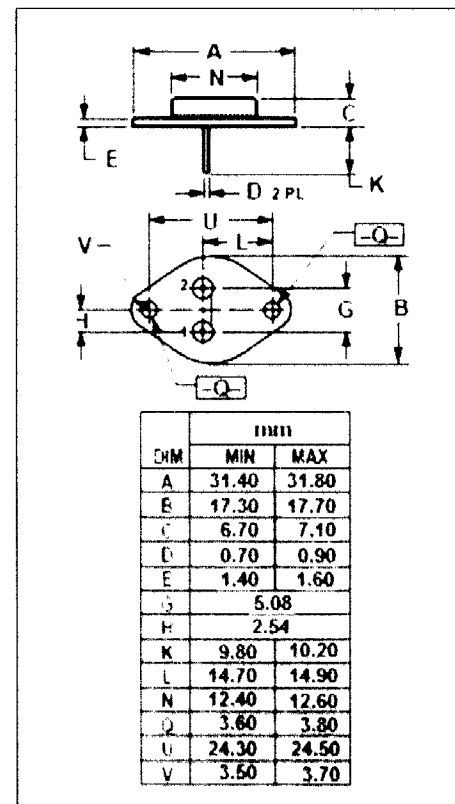
APPLICATIONS

- Power amplifier applications
- Driver stage amplifier applications

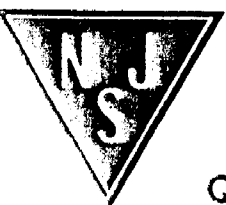


ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-160	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-1.5	A
I_E	Emitter Current- Continuous	1.5	A
P_C	Total Power Dissipation @ $T_C=25^\circ\text{C}$	25	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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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	$I_C = -10\text{mA}$; $I_B = 0$	-160			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -1\text{mA}$; $I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -0.5\text{A}$; $I_B = -50\text{mA}$			-1.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -0.5\text{A}$; $V_{CE} = -5\text{V}$			-1.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -160\text{V}$; $I_E = 0$			-1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}$; $I_C = 0$			-1.0	μA
h_{FE}	DC Current Gain	$I_C = -0.1\text{A}$; $V_{CE} = -5\text{V}$	70		240	
C_{OB}	Output Capacitance	$I_E = 0$; $V_{CB} = -10\text{V}$; $f_{test} = 1\text{MHz}$		30		pF
f_T	Current-Gain—Bandwidth Product	$I_C = -0.1\text{A}$; $V_{CE} = -10\text{V}$		100		MHz

◆ h_{FE} Classifications

O	Y
70-140	120-240