

Silicon PNP Power Transistor

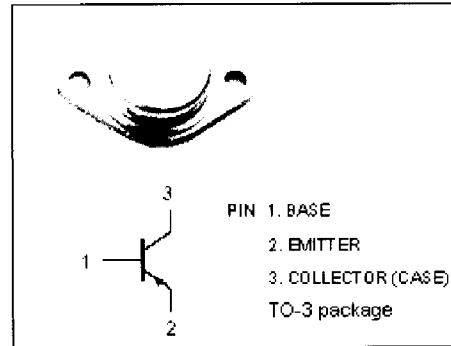
2SA971

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -150V(\text{Min.})$
- High Power Dissipation

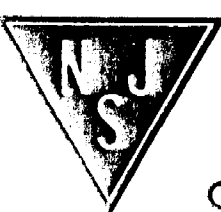
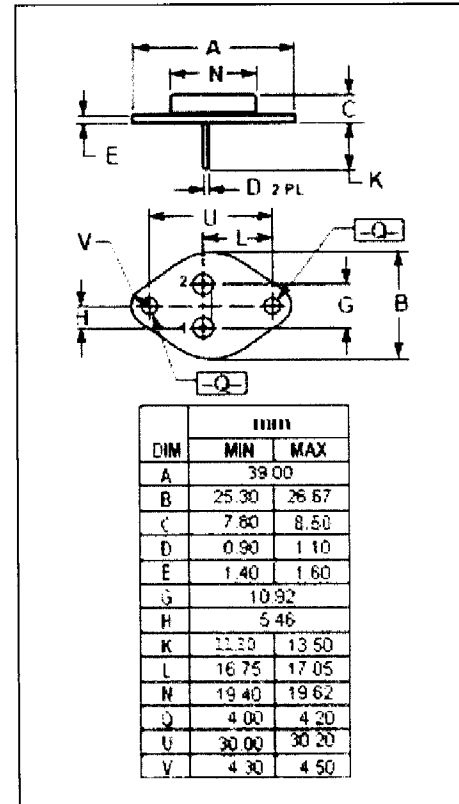
APPLICATIONS

- Designed for general purpose applications.



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-150	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-15	A
I_B	Base Current-Continuous	-5	A
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	150	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



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Silicon PNP Power Transistor**2SA971****ELECTRICAL CHARACTERISTICS**T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -50mA; I _B = 0	-150			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = -1mA; I _E = 0	-150			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -1mA; I _C = 0	-6			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -10A; I _B = -1A			-3.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -150V; I _E = 0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -6V; I _C = 0			-100	μ A
h _{FE}	DC Current Gain	I _C = -5A; V _{CE} = -4V	30			
C _{OB}	Collector Output Capacitance	I _E = 0; V _{CB} = -10V; f=1MHz		270		pF
f _T	Current-Gain—Bandwidth Product	I _C = -0.5A; V _{CE} = -10V		10		MHz