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Silicon PNP Power Transistor

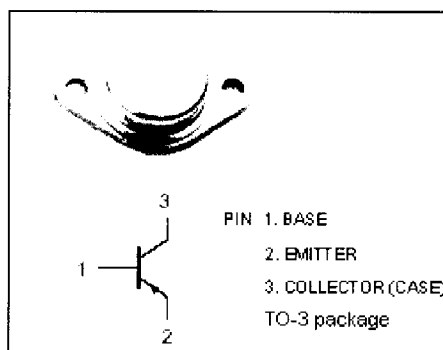
2SA981

DESCRIPTION

- High Power Dissipation-
: $P_C = 80W(\text{Max.})@T_C=25^\circ\text{C}$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -120V(\text{Min.})$
- Complement to Type 2SC2261

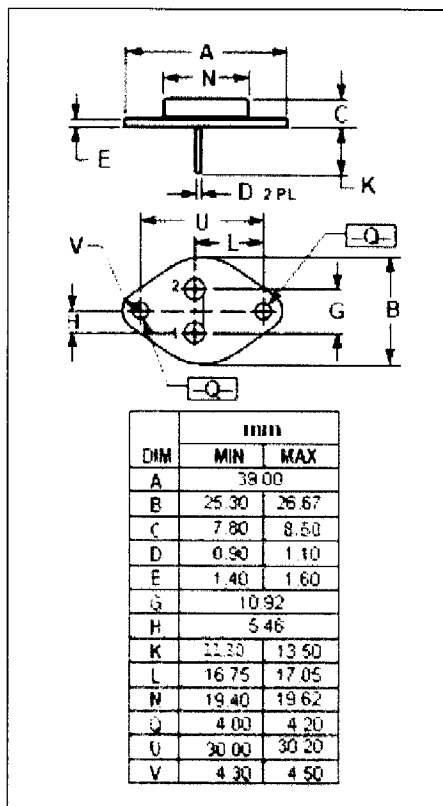
APPLICATIONS

- Designed for general purpose applications.



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-8	A
I_B	Base Current-Continuous	-3	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	80	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~150	$^\circ\text{C}$



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

2SA981

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	-120			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -3A; I _B = -0.3A			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -120V; I _E = 0			-0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -6V; I _C = 0			-0.1	mA
h _{FE}	DC Current Gain	I _C = -3A; V _{CE} = -4V	30			
f _T	Current-Gain—Bandwidth Product	I _E = 0.5A; V _{CE} = -12V		20		MHz

Switching times

t _r	Rise Time	I _C = -3A, R _L = 4Ω, V _{CC} = -12V I _{B1} = -0.2A; I _{B2} = 0.1A		0.85		μs
t _{stg}	Storage Time			2.0		μs
t _f	Fall Time			0.3		μs