

Silicon PNP Power Transistor

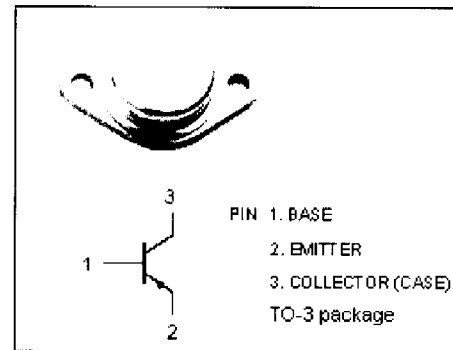
2SA657

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
 : $V_{(BR)CEO} = -80V(\text{Min.})$
- Complement to Type 2SC520

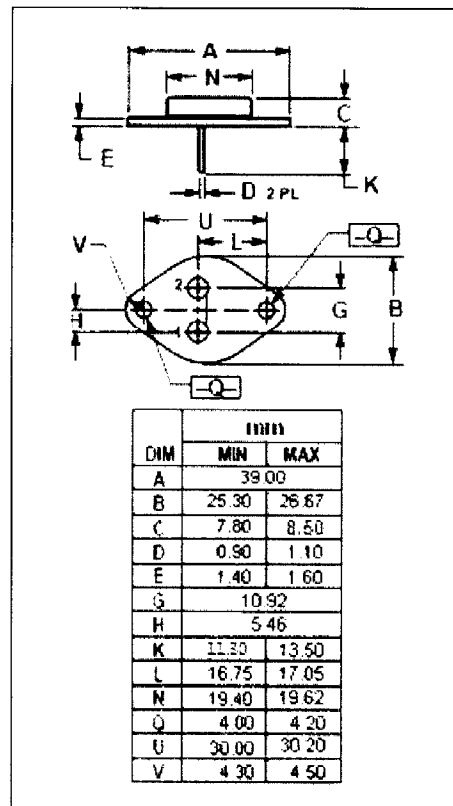
APPLICATIONS

- Power amplifier applications.
- Power switching applications.
- DC-DC converter applications.
- Regulator applications.

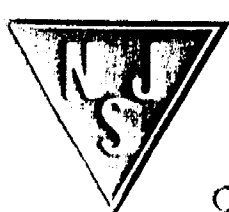


ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-7	A
I_B	Base Current	-2	A
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	50	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~150	$^\circ\text{C}$



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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	-80			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -5A; I _B = -1A			-2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = -5A; I _B = -1A			-2.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -100V; I _E = 0			-0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-5	mA
h _{FE-1}	DC Current Gain	I _C = -1A; V _{CE} = -5V	30		300	
h _{FE-2}	DC Current Gain	I _C = -5A; V _{CE} = -5V	15			
C _{OB}	Collector Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1MHz		150		pF
f _T	Current-Gain—Bandwidth Product	I _C = -1A; V _{CE} = -10V		5		MHz