

Silicon PNP Power Transistor

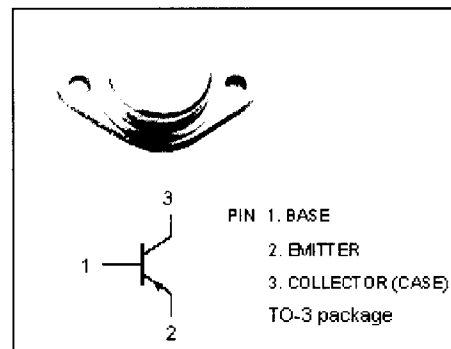
2SA807

DESCRIPTION

- High Power Dissipation-
 : $P_C = 50W(\text{Max.})@T_C=25^\circ\text{C}$
- Collector-Emitter Breakdown Voltage-
 : $V_{(BR)CEO} = -60V(\text{Min.})$

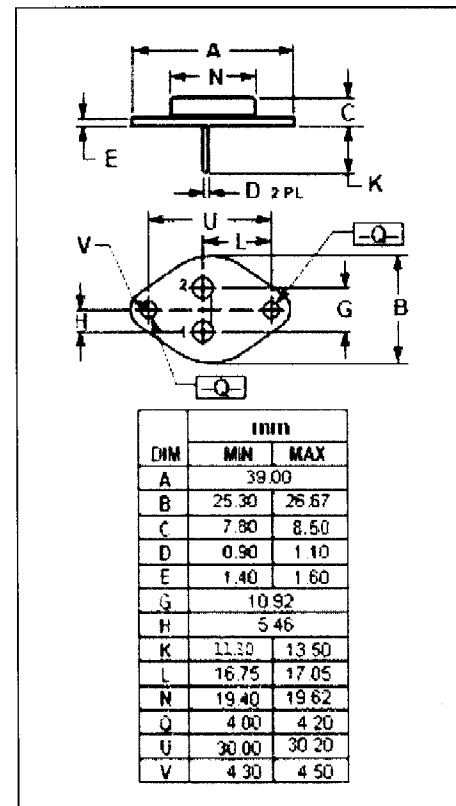
APPLICATIONS

- Designed for general purpose applications.

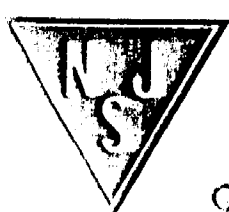


ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-6	A
I_B	Base Current-Continuous	-3	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	-60			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} = -60V; I _E = 0			-1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -6V; I _C = 0			-1.0	mA
h _{FE}	DC Current Gain	I _C = -3A; V _{CE} = -4V	20			
f _T	Current-Gain—Bandwidth Product	I _E = 0.5A; V _{CE} = -12V		10		MHz

Switching times

t _r	Rise Time	I _C = -3A, R _L = 3Ω, V _{CC} = -10V I _{B1} = -0.3A; I _{B2} = 50mA		1.2		μs
t _{stg}	Storage Time			1.8		μs
t _f	Fall Time			0.3		μs