

isc Silicon NPN Power Transistor

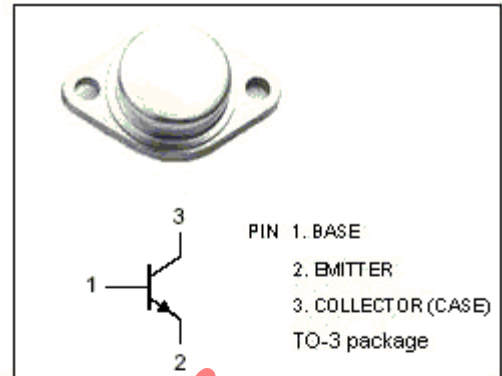
2SC2707

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 180V(\text{Min.})$
- High Power Dissipation
- Complement to Type 2SA1147

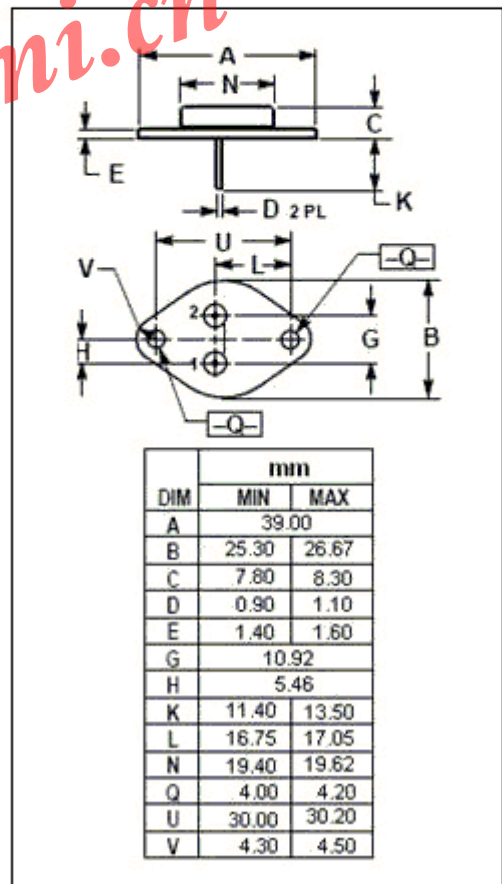
APPLICATIONS

- Designed for power switching amplifier and general purpose applications.



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	180	V
V_{CEO}	Collector-Emitter Voltage	180	V
V_{EBO}	Emitter-Base Voltage	5	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	-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	180			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _E = 0	180			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 10A; I _B = 1A			3.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 180V; I _E = 0			100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			100	μ A
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	55		160	
h _{FE-2}	DC Current Gain	I _C = 5A; V _{CE} = 5V	30			
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 12V		80		MHz