

isc Silicon NPN Power Transistor

2SC3907

DESCRIPTION

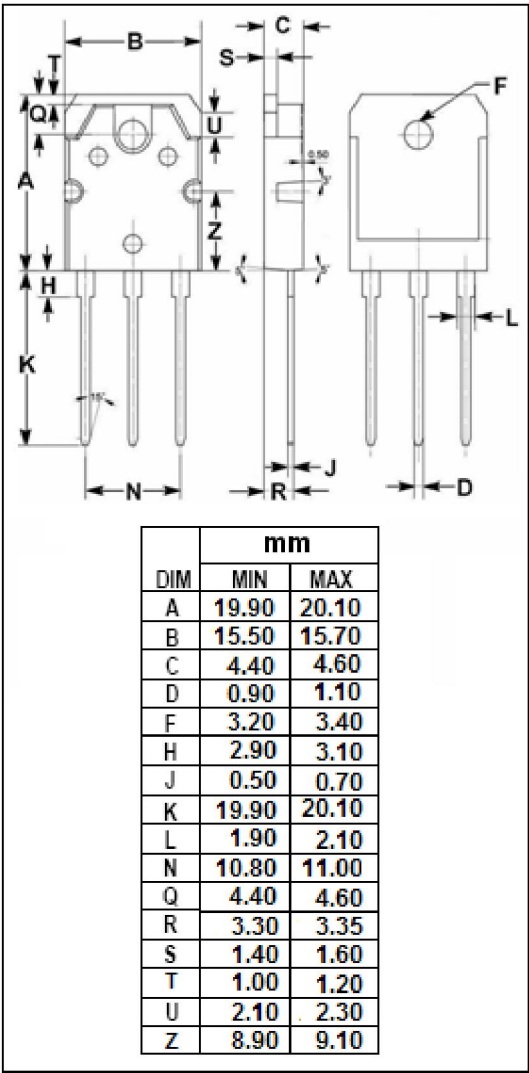
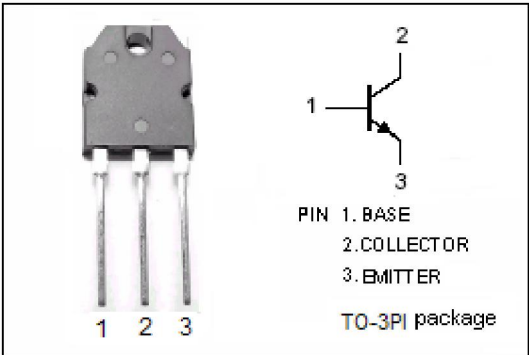
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO}=180V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SA1516

APPLICATIONS

- Power amplifier applications
- Recommend for 80W high fidelity audio frequency amplifier output stage applications

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

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	12	A
I_B	Base Current-Continuous	1.2	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	130	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon NPN Power Transistor**2SC3907****ELECTRICAL CHARACTERISTICS****T_C=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 _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 8A; I _B = 0.8A			2.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 7A; V _{CE} = 5V			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 180V; I _E = 0			5	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			5	μ A
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	55		180	
h _{FE-2}	DC Current Gain	I _C = 7A; V _{CE} = 5V	35			
C _{OB}	Output Capacitance	I _E =0; V _{CB} = 10V; f _{test} = 1.0MHz		270		pF
f _T	Current-Gain—Bandwidth Product	I _C = 1A; V _{CE} = 5V		30		MHz

◆ **h_{FE-1} Classifications**

R	O
55-110	90-180