

isc Silicon PNP Power Transistor

2SA1940

DESCRIPTION

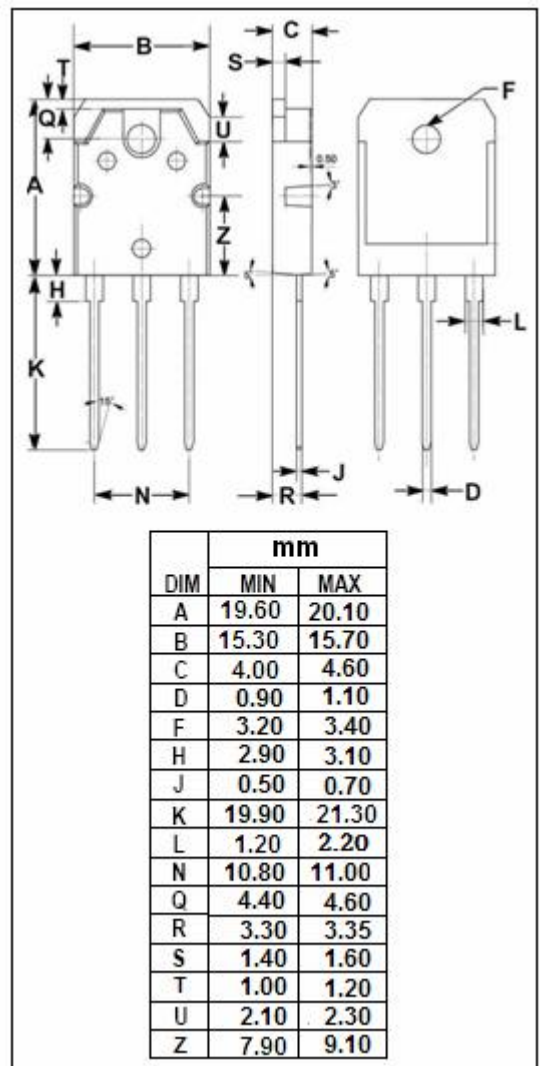
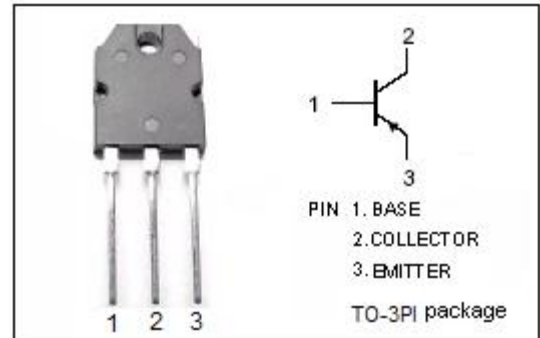
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -2.0V(\text{Min}) @ I_C = -6A$
- Good Linearity of h_{FE}
- Complement to Type 2SC5197
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Power amplifier applications
- Recommend for 55W high fidelity audio frequency amplifier output stage 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	-5	V
I_C	Collector Current-Continuous	-8	A
I_B	Base Current-Continuous	-0.8	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 Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SA1940****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	-120			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -6A; I _B = -0.6A			-2.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -4A ; V _{CE} = -5V			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -120V ; 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		160	
h _{FE-2}	DC Current Gain	I _C = -4A ; V _{CE} = -5V	35			
C _{OB}	Output Capacitance	I _E =0; V _{CB} = -10V; f _{test} = 1.0MHz		260		pF
f _T	Current-Gain—Bandwidth Product	I _C = -1A; V _{CE} = -5V		30		MHz

◆ h_{FE-1} Classifications

R	O
55-110	80-160

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