

isc Silicon PNP Power Transistor
2SA1494
DESCRIPTION

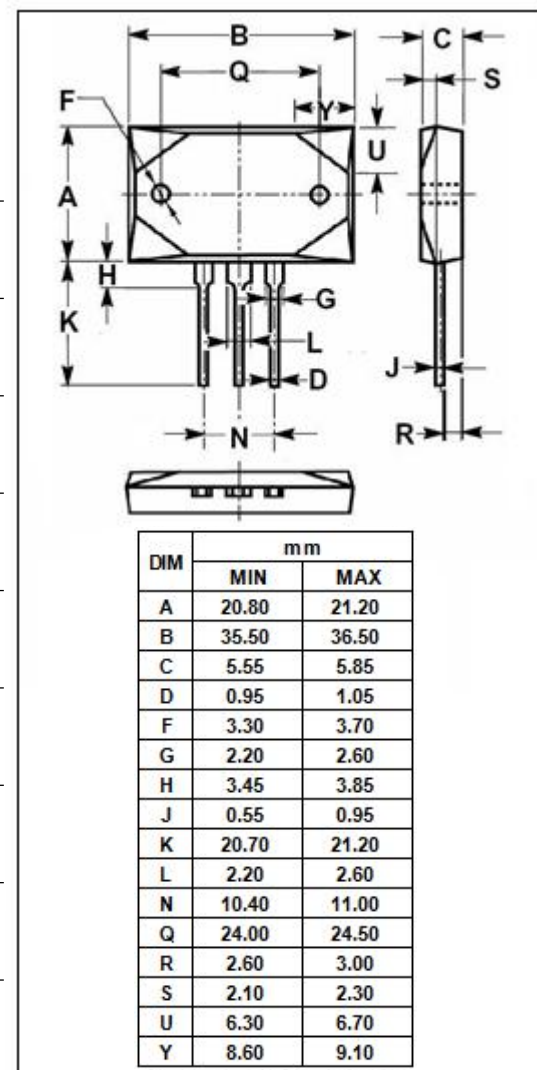
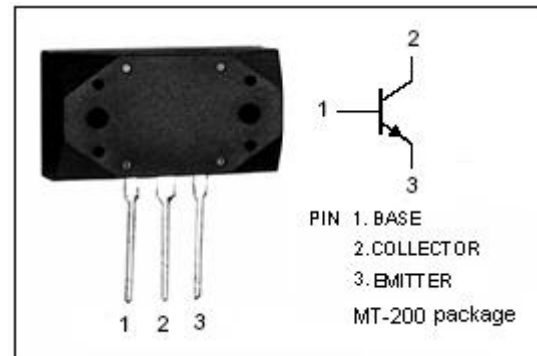
- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = -200V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SC3858
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For audio and general purpose applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-200	V
V_{CEO}	Collector-Emitter Voltage	-200	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-17	A
I_B	Base Current-Continuous	-5	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	200	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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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	-200			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -10A; I _B = -1A			-2.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -200V ; I _E = 0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -6V; I _C = 0			-100	μ A
h _{FE}	DC Current Gain	I _C = -8A ; V _{CE} = -4V	50		180	
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = -10V; f _{test} = 1.0MHZ		500		pF
f _T	Current-Gain—Bandwidth Product	I _E = 1A ; V _{CE} = -12V		20		MHz

Switching times

t _{on}	Turn-on Time			0.6		μ s
t _{stg}	Storage Time	I _C = -10A ,R _L = 4 Ω , I _{B1} = -I _{B2} = -1A,V _{CC} = -40V		0.9		μ s
t _f	Fall Time			0.2		μ s

h_{FE} Classifications

Y	P	G
50-100	70-140	90-180

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