

isc Silicon NPN Power Transistor

2SC3944A

DESCRIPTION

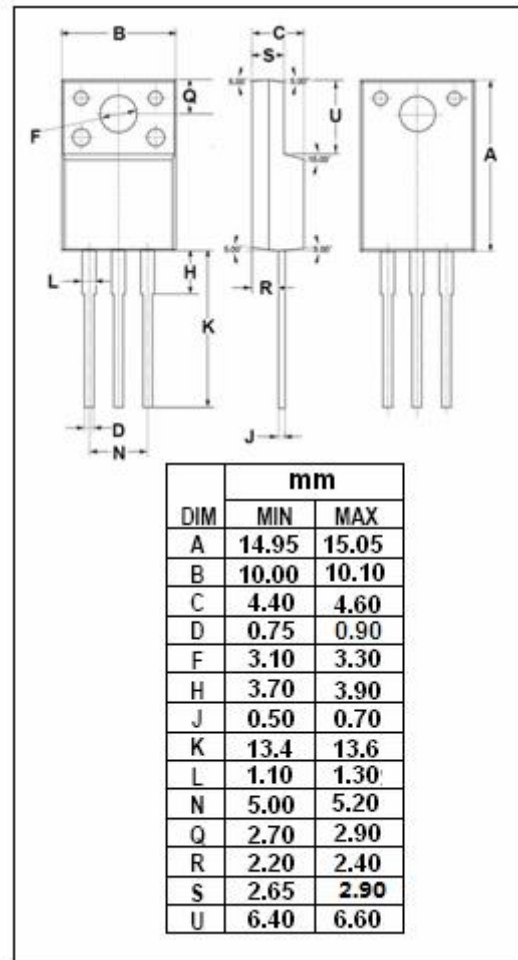
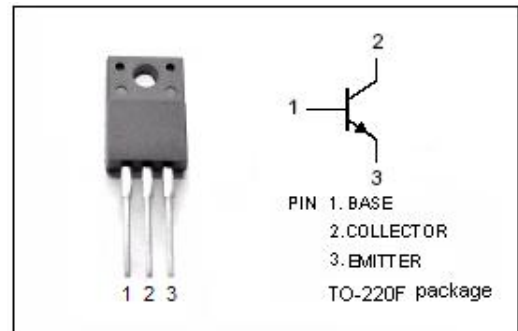
- High Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 180V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SA1535A
- Good Linearity of h_{FE}
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For low frequency driver and high power amplification.

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	1	A
I_{CM}	Collector Current-Peak	1.5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	15	W
	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	2	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC3944A****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 = 1mA; I _B = 0	180			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 10 μA; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 0.5A; I _B = 50mA			2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 0.5A; I _B = 50mA			2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 180V; I _E = 0			10	μA
h _{FE-1}	DC Current Gain	I _C = 150mA; V _{CE} = 10V	95		220	
h _{FE-2}	DC Current Gain	I _C = 0.5A; V _{CE} = 5V	50			
f _T	Current-Gain—Bandwidth Product	I _E = -50mA; V _{CE} = 10V		200		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V, f _{test} = 1MHz		30		pF

◆ **h_{FE-1} Classifications**

Q	R
95-155	130-220

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